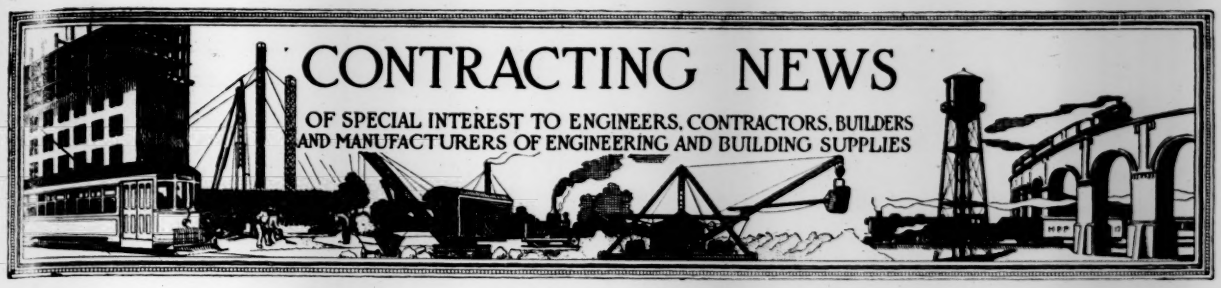
CONTRACTING NEWS
OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS
AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Price advances are indicated by **heavy type**; declines by *italics*.

PIG IRON

Below are the present quotations with a comparison of a month and a year ago.

	Oct. 1, 1917	One Month Ago	One Year Ago
CINCINNATI			
No. 2 Southern foundry	....	$49.90	$17.40
No. 2 Northern foundry	....	56.26	20.26
NEW YORK			
No. 2X Northern foundry	....	52.50	19.50
No. 2 plain Northern foundry	....	52.00	19.25
No. 2 Southern foundry†	....	52.25	19.50
BIRMINGHAM			
No. 2 Southern foundry	....	47.00	14.50
CHICAGO			
No. 2 Northern foundry	*$33.00*	55.00	18.50
PITTSBURGH			
Bessemer iron*	*36.30*	52.95	22.95
Basic iron*	*33.00*	50.95	19.95

*These prices include the freight charge from the valley to the Pittsburgh district. †Delivered Tidewater, New York.

Note—On Sept. 24 the President approved the new schedule of steel prices, that of pig iron being set at $33. Cincinnati, New York and Birmingham are not quoting prices until the differentials have been determined by the Government.

RAILWAY SUPPLIES

STEEL RAILS—The following quotations are per 100 lb. f.o.b. Pittsburgh and Chicago for carload or larger lots. For less than carload lots 5c. per 100 lb. is charged extra:

	Pittsburgh		Chicago	
	Oct. 1, 1917	One Year Ago	Oct. 1, 1917	One Year Ago
Standard bessemer rails	$38.00 to 60.00	$33.00	$38.00	**$33.00**
Standard openhearth rails	40.00 to 60.00	35.00	40.00	35.00
Light rails, 8 to 10 lb.	83.00	50.00	95.00	43.00
Light rails, 12 to 14 lb.	82.00	49.00	95.00	42.00
Light rails, 25 to 45 lb.	75.00	47.00	95.00	40.00
Rerolled rails	75.00 to 80.00	....	....	....

TRACK SUPPLIES—The following prices are base per 100 lb. f.o.b. Pittsburgh for carload lots, together with the warehouse prices at the places named:

	Pittsburgh		Chicago	St. Louis	San Francisco	Dallas
	Oct. 1, 1917	One Year Ago				
Standard railroad spikes	$7.00	$2.65	$5.00	$5.75	**$7.25**	$5.75
Track bolts	7.00 to 8.00	3.25	6.25	Premium	**8.80**	Premium
Standard section angle bars	**3.75 to 4.00**	2.00	4.50	Premium	4.65	Premium

RAILWAY TIES—For fair-sized orders, the following prices per tie hold:

	Material	7 In. x 9 in. by 8 Ft. 6 In.	6 In. x 8 in. by 8 Ft.
New York	Yellow Pine	**$1.32**	**$1.06 to 1.11**
St. Louis	No. 1 White Oak	1.00	.75
Chicago	White Oak	.97	.82
San Francisco	Green	.97	.74
San Francisco	Creosoted	**1.85**	**1.37**

PIPE

PIPE—The following discounts are for carload lots f.o.b. Pittsburgh, basing card in effect July 2, 1917, for iron and May 1 for steel:

Steel			Iron		
Inches	Black	Galvanized	Inches	Black	Galvanized
		BUTT WELD			
¾ to 3	49%	35½%	¾ to 1½	33%	17%
		LAP WELD			
2	42%	29½%	2	26%	12%
2½ to 6	45%	32½%	2½ to 4	28%	15%
7 to 12	42%	28½%	4½ to 6	28%	15%
13 and 14	32½%	....	7 to 12	25%	12%
15	30%	....			
		BUTT WELD, EXTRA STRONG PLAIN ENDS			
¾ to 1½	47%	34½%	¾ to 1½	33%	18%
2 to 3	48%	35½%			
		LAP WELD, EXTRA STRONG PLAIN ENDS			
2	40%	28½%	2	27%	14%
2½ to 4	43%	31½%	2½ to 4	29%	17%
4½ to 6	42%	30½%	4½ to 6	28%	16%
7 to 8	38%	24½%	7 to 8	20%	8%
9 to 12	33%	19½%	9 to 12	15%	2%

From warehouses at the places named the following discounts hold for steel pipe:

Black	New York	Chicago	St. Louis
¾ to 3 in. butt welded	38%	42.8%	34.27%
3½ to 6 in. lap welded	18%	38.8%	21.27%
7 to 12 in. lap welded	10%	35.8%	21.27%
Galvanized			
¾ to 3 in. butt welded	22%	27.8%	19.27%
3½ to 6 in. lap welded	List+20%	24.8%	13.27%
7 to 12 in. lap welded	List	20.8%	6.27%

Malleable fittings, Class B and C, from New York stock sell at 5 and 5% from list prices. Cast iron, standard sizes, 34 and 5%.

CAST-IRON PIPE—The following are prices per net ton for carload lots:

	New York							
	Oct. 1, 1917	1 Mo. Ago	One Yr. Ago	Birmingham	Chicago	St. Louis	San Francisco	Dallas
4 in.	$68.50	$68.50	$34.50	$63.00	$68.50	*$63.00*	$76.00	$72.00
6 in. and over	65.50	65.50	31.50	60.00	65.50	*60.00*	73.00	69.00

Gas pipe and 16-ft. lengths are $1 per ton extra.

CLAY DRAIN TILE—The following prices are per 1000 lin.ft.:

	New York					
Size, In.	Oct. 1, 1917	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	$35.00	$23.00	$18.40	$15.00	$26.25	**$21.55**
4	51.00	32.45	20.70	18.00	34.75	**30.60**
5	65.00	45.00	28.75	23.00	48.75	....
6	90.00	56.55	40.25	27.00	67.50	**50.02**
8	130.00	95.80	74.75	55.00	....	**90.09**

SEWER PIPE—The following prices are in cents per foot for carload lots:

	New York					
Size, In.	Oct. 1, 1917	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	$0.093	$0.078	.....	$0.09	$0.075	$0.1032
4	.093	.078	.....	.10	.10	.1032
5	.1395	.117	.....	.135	.125	.1548
6	.1395	.117	$0.12	.15	.15	.1548
8	.217	.182	.165	.21	.225	.215
10	.3255	.273	.23	.315	.30	.301
12	.4185	.351	.33	.405	.40	.387
15	.558	.468	.50	.54	...	.559
18	.775	.650	.75	.75	.75	.731
20	.93	.780	.90	.90	.962	.86
22	1.24	1.04	1.13	1.20	...	1.118
24	1.395	1.17	1.28	1.35	1.375	1.29
27	2.08	1.755	1.30	...	...	1.935
30	2.304	1.944	1.70	...	...	2.365
33	3.06	2.81	2.25	...	...	3.05
36	3.485	2.972	2.50	...	...	3.44

	Boston	St Paul	Kansas City	Denver	Los Angeles	Seattle
3	*$0.099*	$0.084	$0.10	$0.07	$0.06	$0.075
5	*.1485*	.126	.135	.12	.10	.225
8	*.231*	.175	.18	.19	.18	.4125
12	*.3465*	.315	.36	.31	.32	1.75
24	*1.485*	1.35	1.35	1.14	1.125	.....
36	**3.69**	2.83	3.25	2.10	....	.....

ROAD AND PAVING MATERIALS

ROAD OILS—Following are prices in tank cars 8000 gal. minimum f.o.b. places named:

	Oct. 1, 1917 Gallon	One Month Ago Gallon
New York, 40-50% asphalt	....c.*	....c.
New York, 60-70% asphalt	....c.*	....c.
New York, dust layer	....c.*	....c.
New York, binder	....c.*	....c.
St. Louis, 40-50c% asphalt	**6c.**	5c.
Chicago, 15-20% asphalt	**6½c.**	6½c.
Chicago, dust layer	**8½c.**	8½c.
Chicago, binder	**12½c.**	12½c.
Dallas, 40-50% asphalt	**7c.**	6c.
Dallas, 60-70% asphalt	**8c.**	7c.
Dallas, 75-90% asphalt	**9c.**	8c.
San Francisco, 75-95% asphalt	**$1.90 bbl. (42 gal.)**	**$1.90 bbl.**

*Road oils continue to be extremely scarce in New York.

ASPHALTUM—Price per ton in packages and bulk in carload lots:

	Brand	Package	Bulk
New York	Texaco	**$30.00**	....
Chicago	Mexican	24.00	20.00
St. Louis	Texaco or Mexican	22.50	19.50
St. Louis	Standard	21.00	12.00
San Francisco	California	**16.50**	**13.50**
Dallas	Texaco and Mexican	....	**25.00**
Seattle	....	18.00	....
Denver	California	21.00	....
Denver	Trinidad	31.00	....
Kansas City	Trinidad	**26.37**	....

PAVING STONE—

		Oct. 1, 1917
New York	Manhattan	**$2.50 sq.yd.**
	Other boroughs	2.25 sq.yd.
Boston	5-in. granite	2.55 sq.yd.
Chicago	About 4x8x4 dressed	2.25 sq.yd.
	About 4x8x4 common	1.80 sq.yd.
St. Paul	Sandstone	**1.85 sq.ft.**
San Francisco	Basalt block 4x7x8	**57.75 per M**
Kansas City	Limestone	**2.00 sq.yd.**

FLAGGING—

		Oct. 1, 1917
New York	Bronx	$0.17 sq.ft.
	Manhattan	.18 sq.ft.
	Queens, 5 ft. square	.19 sq.ft.
	5x20-in. cross-walk	.30 sq.ft.
Chicago	18 in. wide	.75 lin.ft.

WOOD BLOCK PAVING—

	Size of Block	Treatment	Per Sq.Yd.
New York	3½	16	$2.00
New York	4	16	2.25
Chicago	4	16	1.85
Chicago	City specifications		1.70
St. Louis	3½	16	1.80
Seattle	4	16	1.50
Kansas City	4	16	2.50
St. Paul	Minneapolis specifications		2.00

CURBING—Prices per linear foot are as follows:

New York	5 x 16	$0.45
	5 x 20	.50
Chicago	6 x 18	.60
St. Louis	5x18 square edge	.72
San Francisco	5 x 16	.75
	5 x 20	.85

CONSTRUCTION MATERIALS

SAND AND GRAVEL—Price for cargo or carload lots is as follows, per cu.yd.:

	Gravel				Sand	
	1½ In.		¾ In.			
	Paving	Oct. 1, 1917	One Yr. Ago	Oct. 1, 1917	One Yr. Ago	Oct. 1, 1917	One Yr. Ago
New York		$1.25*	$1.00	$1.35*	$1.10	$0.50	$0.50
Chicago		1.40	.90	1.40	.90	1.40	.85
St. Louis		1.08	.70	1.08	.70	1.08	.60
Dallas		1.50	....	1.50	....	1.35	....
San Francisco		1.00	1.25	1.00	1.25	1.00	1.20
San Francisco		1.00	1.00	1.00	1.00	1.00	1.00
Seattle		.55	....	.55	....	.55	....
Boston		1.50	....	1.60	....	.80	....
St. Paul		1.10	....	1.40	....	.50	....
Kansas City		2.00	....	2.25	....	.60	....
Denver		1.40	....	1.40	....	.95	....
Los Angeles		.85	....	.85	....	.35	....

*Nominal.

Fine White Sand—St. Louis:

Pacific.....$5.00 per ton Ottawa.....$7.00 per ton

CRUSHED STONE—Price for cargo or carload lots is as follows, per cu.yd.:

	1½ In.		¾ In.	
	Oct. 1, 1917	One Year Ago	Oct. 1, 1917	One Year Ago
New York	$1.15	$0.90	$1.25	$1.00
Chicago	1.40	.90	1.40	.90
St. Louis	1.35	1.00	1.35	1.00
Dallas	1.41	....	1.49	....
San Francisco	1.00	1.25	1.00	1.25
Boston	1.40	....	1.40	....
St. Paul	1.00	....	1.10	....
Kansas City	1.60	....	1.70	....
Denver	1.40	....	1.40	....
Los Angeles	.95	....	1.00	....
Seattle	1.10	....	1.10	....

LIME—Warehouse prices:

	Hydrated per Ton		Lump per 300-Lb. Barrel	
	Finished	Common	Finished	Common
New York	$16.50	....	$2.10	....
Chicago	15.00	12.00	1.90	....
St. Louis	12.00	....	....	10.75
Dallas	20.00	15.00	....	....
San Francisco	18.00	....	1.65	....

ROSENDALE NATURAL CEMENT—Price to dealers for 500 bbl. or over, f.o.b., including bags:

New York.....$1.15

30c. allowed for bags.

PORTLAND CEMENT—These prices are for barrels in carload lots, including bags:

	Oct. 1, 1917	One Month Ago	One Year Ago
New York	$2.22	$2.22	$1.72
Jersey City	2.16	2.16	1.60
Boston	2.77	2.77	1.92
Chicago	2.21	2.21	1.86
Pittsburgh	2.31	2.31	1.81
Cleveland	2.44	2.44	1.94
Detroit	2.40	2.40	1.95
Indianapolis	2.38	2.38	1.99
Toledo	2.40	2.40	1.99
Milwaukee	2.33	2.33	1.98
Minneapolis	2.48	2.48	2.13
Duluth	2.51	2.51	2.06
Peoria	2.33	2.33	1.98
Cedar Rapids	2.48	2.48	2.09
Davenport	2.40	2.40	2.04
St. Louis	2.45	2.45	1.85
Denver	3.20	3.20	....
San Francisco	2.30	2.30	2.30
Dallas	2.40	2.15	....
Los Angeles	2.30	2.30	....
New Orleans	....	2.54	....
Kansas City	2.44	....	....
St. Paul	2.58	2.48	....
Seattle	2.65	....	....

TRIANGLE MESH REINFORCEMENT—Price per 100 sq.ft. in carload lots:

PLAIN 4-IN. x 4-IN. MESH

Style Number	Sectional Area Square Inches per Foot Width	Pittsburgh	New York	Chicago	St. Louis	Dallas	San Francisco
032	0.032	$0.89	$0.92	$0.93	$0.94	$1.06	1.27
049	0.049	1.13	1.18	1.18	1.20	1.34	1.63
068	0.068	1.42	1.47	1.49	1.50	1.68	2.04
093	0.093	1.82	1.89	1.91	1.92	2.17	2.62
123	0.126	2.31	2.39	2.42	2.44	2.74	2.96
153	0.153	2.75	2.86	2.88	2.91	3.27	3.32
180	0.180	3.16	3.27	3.31	3.34	3.76	....
245	0.245	4.17	4.33	4.36	4.41	4.96	5.65
287	0.287	4.82	5.00	5.04	5.10	5.72	6.94
336	0.336	5.55	5.80	5.85	5.92	6.66	....

PLAIN 4-IN. x 8-IN. MESH

036P	0.036	.69	.71	.72	.73	.82
053P	0.053	.97	1.01	1.02	1.03	1.16
072P	0.072	1.26	1.30	1.32	1.33	1.50
097P	0.097	1.62	1.68	1.70	1.71	1.93
049R	0.049	.97	1.01	1.02	1.03	1.15
067R	0.067	1.26	1.30	1.32	1.33	1.50
089R	0.089	1.62	1.68	1.70	1.71	1.93

Made in 16-, 20-, 24-, 28-, 32-, 36-, 40-, 44-, 48-, 52- and 5[illegible] width in rolls 150-, 200- and 300-ft. lengths.

Galvanized runs about 10% higher than plain.

EXPANDED METAL LATH—Prices per 100 yd. for pai[illegible] are as follows:

		Carload					
		New York					
Gage	Weight	Oct. 1, 1917	One Year Ago	Chicago	St. Louis	San Francisco	De[illegible]
27	233	$31.00	$18.00	$31.00	$34.00	$29.00	$3[illegible]
26	250	32.05	19.00	32.00	35.00	30.25	....
25	300	33.15	20.00	33.00	....	....	3[illegible]
24	340	34.25	21.00	34.00	37.00	33.00	3[illegible]
22	450	36.45	24.00	36.00	....	....	....

About 10% additional for smaller quantities.

BARS, CONCRETE REINFORCING—The following quotations are per 100 lb.:

ROLLED FROM BILLETS

		New York		Warehouse			
In.	Mill Shipment	Oct. 1, 1917	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
¾ and larger	*	$5.10	$3.35	†....	$4.50	$6.50	$4.75
⅝	*	5.15	3.45	†....	4.55	6.55	4.80
½	*	5.20	3.50	†....	4.60	6.60	4.85
⅜	*	5.35	3.75	†....	4.75	6.75	5.00
¼	*	5.60	4.10	†....	5.00	7.00	6.00

*Mill quotations on actual specifications.

†No quotations; market nominal on Government price.

ROLLED FROM RAILS

	Dallas	Chicago
¾ in. and larger	$4.75	$4.50
⅝	4.80	4.55
½	4.85	4.60
⅜	5.00	4.75
¼	6.00	5.00

BRICK—To contractors the price per 1000 in cargo or carload lots is as follows:

	Common			Paving	
	Oct. 1, 1917	One Month Ago	One Year Ago	Brick	Block
New York	$8.25	$8.50	$7.00	$32.00	$38.00
Boston	13.25	13.25	....	....	25.00
Chicago	8.00	8.00	6.00	16.00	24.00
St. Louis, salmon	8.00	8.00	7.75	18.00	....
St. Louis, selectel	10.00	10.00	10.50	....	....
Denver	8.00	8.00	....	....	14.00
Los Angeles	6.50	7.50	....	....	28.00
San Francisco	10.00	10.00	10.00	....	....
Dallas	8.60	8.10	....	22.00	22.50
New Orleans	....	9.00	....	....	....
Kansas City	11.00	11.00	....	....	20.00
St. Paul	8.70	....	....	....	27.00
Seattle	9.00	....	....	....	28.75

HOLLOW TILE—Hollow building tile price per block in cents:

	New York				
	Oct. 1, 1917	One Year Ago	Chicago	St. Louis	San Francisco
4x12x12	$0.0925	$0.070	$0.079	$0.054	$0.0825
6x12x12	.1295	.098	.12	.066	.11
8x12x12	.15725	.119	.135	.09	.1375
10x12x12	.185	.140	.16	.15	.20
12x12x12	.23125	.1750	.20	.18	.22

	4x12x12	8x12x12	12x12x12
Boston	$0.0957	$0.171	$0.2266
St. Paul	.055	.153	.138
Kansas City	.0585	.1125	.1575
Denver	.09	.17	.25
Los Angeles	.055	.10	.165
Seattle	.06	.10	.16

STRUCTURAL MATERIAL—The following are the base prices f.o.b. mill, Pittsburgh, together with the quotations per 100 lb. from warehouses at the places named:

		New York				
	*Pittsburgh	Oct. 1, 1917	1 Yr. Ago	St. Louis	Chicago	San Francisco	Dallas
Beams, 3 to 15 in.	(3.00)	$5.25	$3.35	$5.05	$5.00	$7.75	$6.00
Channels, 3 to 15 in.	(3.00)	5.25	3.35	5.05	5.00	7.75	6.00
Angles, 3 to 6 in., ¼ in. thick	(3.00)	5.25	3.35	5.05	5.00	7.75	6.00
Tees, 3 in and larger	(3.00)	5.30	3.40	5.05	5.05	7.75	6.00
Plates	(3.25)	10.00	4.00	10.05	10.00	10.50	9.00

*Government price.

RIVETS—The following quotations are per 100 lb.:

STRUCTURAL

	Mill, Pittsburgh	New York	Warehouse Chicago	St. Louis	San Francisco	Dallas
¾ in. and larger	$5.25	$7.00	$5.50	$5.55	$7.15	$8.50
CONE HEAD BOILER						
¾ in. and larger	5.35	7.10	5.60	5.65	7.25	8.60
⅞ and 1	5.50	7.25	5.75	5.80	7.40	8.65
1½ and 1⅛	5.85	7.60	6.10	6.15	7.75	9.00

Lengths shorter than 1 in. take an extra of 50c. Lengths between 1 in. and 2 in. take an extra of 25c.

PREPARED ROOFINGS—Standard grade rubbered surface, complete with nails and cement, costs per square as follows in New York, St. Louis, Chicago and San Francisco:

	1-Ply		2-Ply		3-Ply	
	c.l.	l.c.l.	c.l.	l.c.l.	c.l.	l.c.l.
No. 1 grade	$1.15	$1.40	$1.45	$1.60	$1.75	$1.90
No. 2 grade	1.10	1.25	1.25	1.40	1.50	1.65

Asbestos asphalt-saturated felt (14 lb. per square) costs $6.50 per 100 lb.

Slate-surfaced roofing (red and green) in rolls of 108 sq.ft. costs $1.85 per roll in carload lots and $2.10 for smaller quantities.

Shingles, red and green slate finish, cost $4.75 per square in carloads. $5 in smaller quantities, in Philadelphia.

ROOFING MATERIALS—Prices per ton f.o.b. New York or Chicago:

	Carload Lots	Less Than Carload Lots
Tar felt (14 lb. per square of 100 sq.ft.)	$61.00	$62.00
Tar pitch (in 400-lb. bbl.)	15.00	16.50
Asphalt pitch (in barrels)	29.00	30.50
Asphalt felt	60.00	62.00

SHEETS—Quotations are in cents per pound in various cities from warehouse, also the base quotations from mill:

Blue Annealed	Large Lots, Pittsburgh	St. Louis	Chicago	San Francisco	New York
No. 10	*8.00*	10.05	10.00	11.00	10.00
No. 12	*8.05*	10.10	10.05	11.05	10.05
No. 14	*8.10*	10.15	10.10	11.10	10.10
Black					
Nos. 18 and 20	*7.80*	10.15	9.80	11.07	10.30
Nos. 22 and 24	*7.85*	10.20	9.85	11.12	10.35
No. 26	*7.90*	10.25	9.90	11.12	10.40
No. 28	*8.00*	10.35	10.00	11.57	10.50
Galvanized					
No. 10	*8.50*	10.95	10.70	....	10.80
No. 12	*8.60*	10.95	10.70	12.15	10.90
No. 14	*8.60*	10.95	10.70	12.15	10.90
Nos. 18 and 20	*8.90*	11.15	11.00	12.45	11.25
Nos. 22 and 24	*9.05*	11.30	11.15	12.59	11.55
No. 26	*9.20*	11.45	11.20	12.74	11.70
No. 28	*9.50*	11.75	11.50	13.03	12.00

LINSEED OIL—These prices are per gallon:

	New York Oct. 1, 1917	New York One Year Ago	Cleveland Oct. 1, 1917	Cleveland One Year Ago	Chicago Oct. 1, 1917	Chicago One Year Ago
Raw in barrels	*$1.23*	$0.73	$1.30	$0.77	$1.27	$0.75
5-gal. cans	*1.33*	.83	1.40	.87	1.37	.85

WHITE AND RED LEAD in 500-lb. lots sell as follows in cents per pound:

	Red Oct. 1, 1917 Dry	Red Oct. 1, 1917 In Oil	Red 1 Year Ago Dry	Red 1 Year Ago In Oil	White Oct. 1, 1917 Dry and In Oil	White 1 Yr. Ago Dry and In Oil
100-lb. keg	*12.25*	*12.50*	10.50	11.00	*12.00*	10.50
25- and 50-lb. kegs	*12.50*	*12.75*	10.75	11.25	*12.25*	10.75
12½-lb. keg	*12.75*	*13.00*	11.00	11.50	*12.50*	11.00
1- to 5-lb. cans	*14.25*	*14.50*	12.50	12.50	*14.50*	12.50

LUMBER*—Price per M in carload lots:

Square Edge and Sound Green

	Southern Pine New York 20 Ft. and Under	Southern Pine New York 22-24 Ft.	Southern Pine Chicago 20 Ft. and Under	Southern Pine Chicago 22-24 Ft.	Yellow Pine St. Louis 20 Ft. and Under	Yellow Pine St. Louis 22-24 Ft.
3x 4 to 8x 8	$32.75	$33.75	$30.75	$31.75	$27.75	$28.75
3x10 to 10x10	32.75	38.75	35.75	36.75	32.75	33.75
3x12 to 12x12	41.75	42.75	39.75	40.75	36.75	37.75
3x14 to 14x14	43.75	44.75	41.75	42.75	38.75	39.75
3x16 to 16x16	46.75	47.75	44.75	45.75	41.75	42.75
3x18 to 18x18	51.75	52.75	49.75	50.75	46.75	47.75
4x20 to 20x20	56.75	57.75	54.75	55.75	51.75	52.75

Over 24 ft.—Add $1 for each additional 2 ft. in length up to 40 ft. for sizes 12 x 12 and under; for sizes over 12 x 12 add $2. For merchantable add $2 to sizes 10 x 10 and under. For prime add $2 to the price of merchantable for all sizes.

*Prices from Lumberman's Bureau.

Rough Douglas Fir, No. 1 Common—More than carload lots in San Francisco:

Size in Inches	15 Ft. and Under	16 to 24 Ft.	25 to 32 Ft.
3 and 4x4	$24.00	$25.50	....
3 and 4x6 and 8	24.00	24.50	$25.50
6x6 and 8x8	24.00	25.50	25.50
3 and 4x10	24.00	25.50	26.50
6 and 8x10	25.00	26.00	27.00
3 and 4x12	24.00	25.50	26.50
6 and 8x12	25.50	26.50	26.50
10 and 12x12	25.00	25.00	27.00
3 and 4x14	25.00	27.00	28.00
6 and 8x14	26.50	27.50	27.50
7 and 9x14	27.50	28.50	28.50
10 and 12x14	26.00	26.00	28.00

Yellow Pine—Dallas. Price per M:

2x4 to 2x12—12 to 16 ft. long	$32.50
2x4 to 2x12—10, 18 and 20 ft. long	35.00
2x4 to 2x12—22 and 24 ft. long	37.50
4x4, 4x6, 6x6, 8x8, 3x8	37.50
8x10, 10x10, 3x10	40.00
12x12, 3x12	40.00

	8 x 8-In. x 20 Ft. and Under Y.P.	Fir	Hemlock	Spruce	12 x 12-In. 20 Ft. and Under Y.P.	Fir
Boston	....	....	....	$40.00	....	....
Kansas City	$39.00	*$34.00*	*$34.00*	....	$45.00	*$34.00*
Seattle	21.00	21.00	21.00	21.00	21.00	21.00
Los Angeles	....	30.00	30.00	....	....	30.00
San Francisco	....	24.00	24.00	....	....	24.00
St. Paul	....	38.00	31.50	....	....	43.00
Denver	....	30.00	....	27.50	....	32.00

	1-In. Rough, 10 In. x 16 Ft. and Under Y.P.	Fir	Hemlock	2-In. T. and G. 10 In. x 16 Ft. Y.P.	Fir
Boston	....	....	....	....	....
Kansas City	*$13.00*	*$13.50*	*$12.00*	*$51.00*	....
Seattle	21.00	21.00	21.00	21.00	$21.00
Los Angeles	30.00	30.00	....	....	....
San Francisco	....	24.00	24.00	....	24.00
St. Paul	....	51.00	34.00	59.00	37.50
Denver	....	30.00	30.00	....	30.00

*Market demoralized, tending upward.

NAILS—The following quotations are per keg from warehouse:

	Pittsburgh, Mill	St. Louis	Denver	Chicago	San Francisco	Dallas
Wire	$4.00	$4.00	$4.45	$4.45	$4.60	$4.45
Cut	4.65	5.00	5.00	4.60	6.15	....

MISCELLANEOUS

FREIGHT RATES—On finished steel products in the Pittsburgh district, including plates, structural shapes, merchant steel, bars, pipe fittings, plain and galvanized wire nails, rivets, spikes, bolts, flat sheets (except planished), chains, etc., the following freight rates are effective in cents per 100 lb.:

Boston	21.5	New Orleans	30.7
Buffalo	11.6	New York	19.5
Chicago	18.9	Pacific Coast (all rail)	75.0
Cincinnati	15.8	Philadelphia	18.5
Cleveland	10.5	St. Louis	23.6
Denver	68.6	St. Paul	32.9
Kansas City	43.6		

WATER TREATMENT CHEMICALS—Prices per pound are as follows:

	New York	Chicago
Sulphate of alumina (iron free), in 400-lb. barrel	$0.045	....
Hypochlorite of lime (bleaching powder), in 700-lb. drums	.03	$0.0375
Soda ash, in 400-lb. bbl.	.05	.0375
Liquid chlorine	.175	.16

Lime is quoted separately, on p. 140.

CONTRACTORS' MISCELLANEOUS SUPPLIES

STEEL SHEET PILING—The following price is base per 100 lb. f.o.b. Pittsburgh, with a comparison of a month and a year ago:

Oct. 1, 1917	One Month Ago	One Year Ago
$4.50 to $5.00	$4.50 to $5.00	$2.50 to $2.60

WIRE ROPE—Discounts from list price on regular grades of bright and galvanized are as follows:

	New York	St. Louis	Chicago	San Francisco
Galvanized	10—2½ %	10—2½ %	10—2½ %	10 %
Bright	20—2½ %	20—2½ %	20—2½ %	15 %

MANILA ROPE—For rope smaller than ⅝-in. the price is ½ to 2c. extra; while for quantities amounting to less than 600 ft. there is an extra charge of 1c. The number of feet per pound for the various sizes is as follows: ⅝-in., 8 ft.; ¾-in., 6; ⅞-in., 4½; 1-in., 3½; 1¼-in., 2 ft. 10 in.; 1½-in., 2 ft. 4 in. Following is price per pound for ⅝-in. and larger, in 1200-ft. coils:

Boston	$0.34	Kansas City	$0.33½
New York	.33½	Los Angeles	.30
Chicago	.31½	Seattle	.33½
St. Paul	.34	Denver	.34

EXPLOSIVES—Price per pound in small lots at cities named:

	Low Freezing 20%	Gelatin 40%	Gelatin 60%	Gelatin 80%	Black Powder
New York	....	$0.26½	$0.34½	....	$2.50*
Boston	.... †	.... †	.36¼	$0.43¾	....
Kansas City	$0.20	.26¼	.33¼	.43¼	....
New Orleans	....	.25¼	.30¼	....	....
Los Angeles	.19	.25	.32½	....	....
Seattle	.37	.49½	.63½	.83½	....
Chicago	.18¾	.22¾	.32¼	.42	....
St. Paul	.20	.26¼	.33¼	....	2.55*
St. Louis	.16¼	.20½‡	.29½	.39½	2.15*
Denver	.19	.25¼	.32¼	.42¼	....
Dallas	.25	.29	.39	.49	....

*25-lb. kegs. †No local demand. ‡45%.

POLES—Prices on Western red cedar poles:

	New York 72-82	Chicago 52-62	St. Louis 52-62	Denver 33-42
6 in. by 30 ft.	$5.59	$4.94	$4.94	$4.32
7 in. by 30 ft.	7.40	6.60	6.60	5.80
7 in. by 35 ft.	10.70	9.60	9.60	8.55
8 in. by 35 ft.	12.20	10.90	10.90	9.65
7 in. by 40 ft.	12.35	11.00	11.00	9.75
8 in. by 40 ft.	13.75	12.15	12.15	10.65
8 in. by 45 ft.	18.20	16.20	16.20	14.30
8 in. by 50 ft.	21.85	19.45	19.45	17.15

OLD MATERIAL—The prices following are per gross ton paid to dealers and producers in New York. In Chicago and St. Louis the quotations are per net ton and cover delivery at the buyer's works, including freight transfer charges:

	New York Oct. 1, 1917	New York One Month Ago
Heavy melting steel scrap	$28.50 to 29.50	$27.50 to 28.50
No. 1 railroad wrought	39.00 to 40.00	39.00 to 40.00
Stove plate	20.00 to 25.00	18.00 to 20.00
No. 1 machinery cast	30.00 to 31.00	30.00 to 31.00
Machine shop turnings	18.00 to 19.00	16.00 to 18.00
Cast borings	20.00 to 21.00	19.00 to 20.00
Railroad malleable cast	32.00	30.00 to 32.00

	Chicago Oct. 1, 1917	Chicago One Month Ago
No. 1 railroad wrought	$36.00	$36.00
Stove plate	17.25	17.25
No. 1 machinery cast	25.00	25.00
Machine shop turnings	17.00	17.00
Cast borings	17.00	17.00
Railroad malleable cast	30.00	30.00

	St. Louis Price Delivered Oct. 1, 1917	St. Louis Price Delivered One Month Ago
No. 1 railroad wrought	*$31.50*	$33.00
Stove plate	16.00 to 17.00	16.50
No. 1 machinery cast	*21.00 to 22.50*	23.00
Machine shop turnings	*12.00 to 14.00*	14.50
Cast borings	*13.00 to 14.00*	14.00
Railroad malleable cast	*25.00 to 26.50*	27.00

Proposals

For Proposals Advertised See Pages 56 to 59 inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Oct. 10.	Polk, Pa. Adv. Sept. 20 and 27.	Sept. 20
Oct. 12.	Pender, Neb.	Oct. 4
Oct. 16.	Caldwell, Kan.	Oct. 4
Oct. 19.	Akron, O. Adv. Oct. 4.	Oct. 4

SEWERS

Oct. 8.	Stratford, Conn. Adv. Sept. 20.	Sept. 20
Oct. 11.	Cleveland, O.	Oct. 4
Oct. 12.	North Bergen, N. J. (Weehawken P. O.)	Oct. 4
Oct. 13.	Cuyahoga Falls, O.	Sept. 27
Oct. 14.	Pleasantville, N. J.	Sept. 27
Oct. 16.	Wabash, Minn.	Sept. 27
Oct. 17.	Grosse Point, Ill. Adv. Oct. 4	Oct. 4
Oct. 18.	Santa Barbara, Cal.	Oct. 4
Oct. 25.	St. Joseph, Mich. Adv. Oct. 4.	Oct. 4

BRIDGES

Oct. 6.	Indiana	Sept. 27
Oct. 8.	Minneapolis, Minn.	Sept. 27
Oct. 8.	Challis, Idaho	Oct. 4
Oct. 8.	Highland Park, N. J.	Oct. 4
Oct. 8.	Nez Perce, Idaho	Oct. 4
Oct. 8.	Woodbridge, N. J.	Oct. 4
Oct. 9.	Walker, Minn.	Sept. 20
Oct. 9.	Okanogan, Wash.	Oct. 4
Oct. 10.	Cleveland, O.	Oct. 4
Oct. 10.	Germantown, O.	Oct. 4
Oct. 12.	Somerville, N. J.	Oct. 4
Oct. 13.	Weston, W. Va.	Sept. 27
Oct. 15.	Tallahassee, Fla.	Oct. 4
Oct. 15.	California	Oct. 4
Oct. 16.	Tampa, Fla.	Oct. 4
Oct. 16.	Glenville, W. Va.	Sept. 27
Oct. 17.	Butler, Pa. Adv. Oct. 4.	Oct. 4
Oct. 20.	Pennsylvania	Sept. 20
Oct. 20.	Charleston, W. Va.	Sept. 27
Oce. 23.	Ft. Dodge, Ia. Adv. Sept. 27 and Oct. 4.	Sept. 27

STREETS AND ROADS

Oct. 8.	California	Sept. 20
Oct. 8.	Mendota, Ill.	Sept. 27
Oct. 8.	Louisiana	Oct. 4
Oct. 8.	St. George, S. I., N. Y.	Oct. 4
Oct. 9.	Pennsylvania Adv. Sept. 20 to Oct. 4.	Sept. 20
Oct. 9.	Modesta, Cal.	Sept. 27
Oct. 10.	Brooklyn, N. Y.	Oct. 4
Oct. 10.	Little Rock, Ark.	Oct. 4
Oct. 11.	Newton, N. J. Adv. Sept. 20 and 27.	Sept. 20
Oct. 11.	Oneonta, Ala.	Sept. 13
Oct. 12.	Ohio	Oct. 4
Oct. 12.	Stealey Heights, W. Va. (Clarksburg P. O.)	Sept. 27
Oct. 13.	Wedowee, Ala.	Sept. 20
Oct. 15.	Newark, N. J.	Sept. 13
Oct. 16.	Cape May, N. J.	Sept. 6
Oct. 16.	Pennsylvania	Sept. 20
Oct. 16.	Billings, Mont.	Oct. 4
Oct. 16.	Johnson, Tenn.	Oct. 4
Oct. 22.	Clarendon, Ark.	Oct. 4
Oct. 24.	Paterson, N. J.	Sept. 27
Oct. 24.	Santa Barbara, Cal.	Oct. 4
Nov. 5.	Pikeville, Ky.	Sept. 27

EXCAVATION AND DREDGING

Oct. 6.	Lawrenceville, Ill.	Oct. 4
Oct. 8.	Marshall, Minn.	Sept. 27
Oct. 8.	Belvue, Kan.	Oct. 4
Oct. 9.	Albany, N. Y. Adv. Sept. 13 to Oct. 4.	Sept. 13
Oct. 9.	Boone, Ia.	Oct. 4
Oct. 10.	Willmar, Minn.	Sept. 27
Oct. 10.	Lafayette, Ind.	Sept. 20
Oct. 12.	Gaylord, Minn.	Oct. 4
Oct. 15.	Willmar, Minn.	Sept. 13
Oct. 15.	Havana, Ill.	Oct. 4
Oct. 16.	St. Peter, Minn.	Oct. 4
Oct. 19.	Mankato, Minn.	Oct. 4
Oct. 20.	Waterford, Cal.	Sept. 27
Oct. 22.	Elbow Lake, Minn.	Oct. 4
Oct. 22.	Rockport, Ind.	Oct. 4
Oct. 24.	Lesueur Center, Minn.	Oct. 4
Nov. 9.	St. Cloud, Minn.	Sept. 27

Bids Close		See Eng. News-Record

BUILDINGS

Oct. 9.	Cincinnati, O.	Oct. 4
Oct. 15.	New York, N. Y.	Sept. 27
Oct. 15.	Beaumont, Tex.	Oct. 4
Oct. 17.	Wichita, Kan.	Oct. 4
Oct. 18.	Red Bank, N. J.	Oct. 4
Oct. 20.	Oxford, O.	Sept. 27
Oct. 23.	Ft. Wayne, Ind.	Oct. 4
Oct. 23.	Smith Center, Kan.	Oct. 4
Oct. 24.	Abilene, Kan.	Oct. 4
Nov. 25.	Middletown, Mass.	Oct. 4
Dec. 1.	Norfolk, Va.	Sept. 13

FEDERAL GOVERNMENT WORK

Oct. 6.	Newport, R. I. Adv. Sept. 13 to Oct. 4.	Sept. 13
Oct. 8.	Pensacola, Fla.	Sept. 27
Oct. 8.	Ft. Mifflin, Pa.	Sept. 27
Oct. 8.	Washington, D. C.	Sept. 27
Oct. 8.	New Orleans, La.	Oct. 4
Oct. 8.	Indian Head, Md.	Oct. 4
Oct. 8.	Philadelphia, Pa.	Oct. 4
Oct. 12.	Bad Axe, Mich.	Sept. 13
Oct. 15.	Denver, Colo. Adv. Sept. 13.	Sept. 13
Oct. 15.	Waynesboro, Va.	Sept. 13
Oct. 15.	El Paso, Tex. Adv. Sept. 20.	Sept. 20
Oct. 15.	Philadelphia, Pa.	Sept. 27
Oct. 15.	Denver, Colo.	Sept. 27
Oce. 15.	El Paso, Tex.	Sept. 27
Oct. 15.	Ft. Mifflin, Pa.	Oct. 4
Oct. 15.	Detroit, Mich. Adv. Oct. 4.	Oct. 4
Oct. 23.	Andalusia, Ala.	Sept. 20
Oct. 24.	Bakersfield, Cal. Adv. Sept. 20 and 27.	Sept. 20
Oct. 26.	Mt. Carmel, Ill.	Sept. 20
Oct. 28.	Waterloo, N. Y.	Sept. 20
Oct. 30.	Key West, Fla. Adv. Sept. 6 and 13.	Sept. 6
Oct. 30.	Farmville, Va.	Sept. 27
Oct. 31.	Brooklyn, N. Y.	Oct. 4
Oct. 31.	Hollidaysburg, Pa. Adv. Oct. 4.	Oct. 4
Nov. 1.	Kenton, O.	Sept. 27
Nov. 1.	Detroit, Mich. Adv. Oct. 4.	Oct. 4
Nov. 2.	Cincinnati, O. Adv. Oct. 4.	Oct. 4
Nov. 2.	Valparaiso, Ind.	Oct. 4
Nov. 5.	Burlington, N. C.	Oct. 4

MISCELLANEOUS

Oct. 8.	Elevated Railway—Brooklyn, N. Y.	Sept. 20
Oct. 17.	Dike—Bernalilo, N. M.	Oct. 4
Oct. 17.	Pier—Manhattan Beach, Cal. Adv. Oct. 4.	Oct. 4
Oct. 23.	Pier—New York, N. Y. Adv. Sept. 27 and Oct. 4.	Sept. 27
Nov. 15.	Flood Control—Dayton, O. Adv. Sept. 13 to 27.	Sept. 13

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

WATER-WORKS

Proposed Work

N. Y., Tonawanda—(Official)—City received no bids furnishing and laying intake pipe in Niagara River. New bids. Noted Sept. 6.

Pa., Newport—Lebanon Valley Water Supply Co. having plans prepared 5,000,000-gal. reservoir in Sand Hill, North Lebanon Twp. About $250,000.

W. Va., Fairmont—City plans 6,000,000-gal. reservoir, 4-stage centrifugal pump and filtration plant. About $40,000. S. B Miller, city engr.

N. C., Wilson—Town plans to issue $50,000 bonds to extend water-works system. W. M. Trotter, city engr.

Tenn., Knoxville—City sold $800,000 bonds to build water, sewer, school, and street improvements in 4 former suburban municipalities. Noted Sept. 13.

Ky., Lawrenceburg—City election in November to vote on $15,000 bond issue to build filtration plant.

Ky., Murray—City issued 20,000 bonds for water-works and electric light system.

O., Sebring—City election in November to vote on $125,000 bond issue to purchase water-work system and build filtration plant.

Mich., Jackson—City election in November to vote on $50,000 bond issue for pumping station. A. W. D. Hall, city engr.

Wis., Niagara — City to issue $35,000 bonds for water-works and sewerage systems. Noted Aug. 16.

Ia., Traer—City plans to improve water-works system, installing large mains and tank. About $25,000. F. F. Stoake, supt.

Tex., El Paso—City plans to install 5,000,000-gal. pumping station. About $75,000. G. Espy, city engr.

Tex., Lockney — City plans waterworks system, installing large mains and tank. About $25,000. F. F. Stoake, supt.

Tex., El Paso—City plans to install 5,000,000-gal. pumping station. About $75,000. G. Espy, city engr.

Tex., Lockney — City plans waterworks system. H. E. Elrod, Interurban Bldg., Dallas, engr.

Tex., Seymour—City sold $12,000 bonds to build water-works system.

Okla., Hunter—Town plans to issue $25,000 bonds for water-works system.

Okla., Miami—City election Oct. 16 to vote on $45,000 bond issue, water main extensions. A. L. Sailors, supt.

Okla., Wapanucka—City election soon to vote on $20,000 bond issue for water-works and electric light systems. Dr. B. L. Neville, mayor. Noted Apr. 26.

Colo., Ft. Morgan—City election Nov. 6th to vote on $25,000 bond issue to improve water-works system. G. O. Cox, supt.

Idaho, Driggs — City to issue $10,000 bonds to improve water-works system.

Utah, Brigham—City having plans prepared by H. S. Kleinschmidt, engr., Salt Lake City, for water-works improvements. Noted Sept. 20.

Nev., Reno—J. B. Holly, Humboldt Bank Bldg., San Francisco, plans to bring water supply from Dog Creek, Sierra Co., Cal. Plans include storage dam, 10 ft. high and pipe line 14 mi. long. About $250,000.

Ariz., Williams—Town election soon to vote on $75,000 bond issue for water-works and electric light systems. L. Stover, supt.

Wash., Waitsburg — City having plans prepared by G. L. Sawyer, engr., White Bldg., Seattle, water-works system. About $50,000. Noted Sept. 6.

Ore., Rainier—City plans filtration plant. 20,000,000 gal. capacity. About $20,000. L. C. Kelsey, Selling Bldg., Portland, engr.

Cal., Martinez—City plans to install water-works system and sewers. About $200,000.

Cal., Seal Beach—See "Sewers."

Cal., Sonoma—(Official)—City election soon to vote on $45,000 bond issue for water-works system. T. Lewis, city engr.

Cal., Tropico—City election Oct. 10th to vote on $50,000 bond issue, water-works system. A. Campbell, supt.

B. C., Prince Rupert—City plans to extend water mains. About $10,000. E. A Woods, city clk.

BIDS DESIRED

O., Akron—(Official)—Until Oct. 19, by C. P. Beck, dir. pub. ser. contr. No. 89, 17,460-ft. 4-16in. c.-i. water pipe; advertised in this issue.

Ill., Grosse Point—(Official)—Until Oct. 17, by Village, for c.i. water pipe, etc. Windes & Marsh, Winnetka, engrs; advertised in this issue.

Kan., Caldwell—(Official)—Until Oct. 16, by H. W. Baker, city clk., for water-works and electric-light improvements, including brick power station and concrete reservoir, 500-g.p.m. motor-driven centrifugal pumps and laying 4-mi. c.-i. pipe. Burns & McDonnell, 402 Inter-State Bldg., Kansas City, Mo., engrs.

Neb., Pender—Until Oct. 12, by City, installing water-works and electric-light plants. Henningson Eng. Co., Omaha, engrs. Noted Sept. 13.

Water-Works (Continued)

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., **New York**—(Official)—Report of contract awarded for Shandaken tunnel to Degnon Contg. Co., 68 Hunters Point Ave., Long Island City, published in last week's issue was incorrect. Bids are still under advisement. Noted Sept. 20.

★N. J., **Bayonne** — (Official) — City let contract laying water mains and appurtenances to C. P. Kavanaugh, Inc., $27,924. Noted Sept. 13.

★N. C., **Belmont**—City let contract water-works system to J. R. McCrary Co., Atlanta, Ga. $20,000 bonds lately issued.

O., **Akron**—(Official)—City received low bids building elevated steel water tank Chicago Bridge & Iron Wks., 37 West Van Buren St., Chicago, 8-post tower, $30,500, 6-post tower, $29,200; Pittsburgh-Des Moines Steel Co., Curry Bldg., Pittsburgh, segmental bottom, $30,950, hemispherical bottom, $31,150; A. Tufts, Candler Annex, Atlanta, Ga., rein.-con. $30,000. Noted Sept. 13.

★Ia., **North McGregor**—City let contract water-works system to Vogelberg & Udelhofen, Potosi, Wis., $10,367. Noted Sept. 13.

★Minn., **Townsend**—City let contract water-works system to Monarch Constr. Co., Bozeman, Mont.

★Mo., **St. Louis**—City let contract furnishing material, excavating, examining, and inspecting 285,000 lin.ft., 6 20-in. c.i. water mains to National Water Main Cleaning Co., 50 Church St., New York City, 17c. and 19c. per lin.ft.

★Tex., **Throckmorton**—City let contract earth dam, 1,500,000 gal. to Stamford Constr. Co., Stamford. Noted Aug. 23.

★Wash., **Seattle**—Bd. Pub. Wks. let contract laying water mains in Michigan St. and others to S. A. Moceri, $11,924.

SEWERS

Proposed Work

N. Y., **Buffalo**—City plans sewers in portions Phyllis, Bailey, Davidson, Millicent, Hastings Aves., and Suffolk St. G. H. Norton, city engr.

N. J., **Woodbury**—City having plans prepared sewerage system and sewage disposal plant.

Pa., **Hazleton**—City had plans prepared sewage-disposal plant. About $50,000. B. E. Youngman, city engr.

Pa., **South Bethlehem**—Council passed ordinance authorizing $55,000 bond issue for building sewers and improving streets. R. M. Brady, boro. engr.

Va., **Richmond**—City plans sewer in Lee Dist. About $40,000. C. E. Bolling, city engr.

S. C., **Columbia**—(Official)—City rejected bids, sanitary sewer outfall, Columbia Canal and Smith's Branch. Noted Sept. 13.

Ga., **Columbus**—(Official)—City defeated at election $177,000 bonds to improve sewers. Noted May 24.

Tenn., **Knoxville**—See "Water-Works."

O., **Akron**—See "Streets and Foads."

O., **Bellevue**—City soon lets contract sewerage system portions Main St. L. C. Herrick, city engr.

O., **Cincinnati**—City election Nov. 6, to vote on $500,000 bond issue to build sewers. F. Krug, city engr.

O., **Cincinnati**—City plans sewer in portions Minion Ave. R. Hoffman, city engr.

O., **Cleveland**—City election Nov. 6 to vote on $300,000 bond issue for sewers. R. Hoffman, city engr.

O., **Cleveland Heights**—(Warrensville P. O.)—Village plans sewer and water connections in 14 streets. About $40,000. H. H. Canfield, Clk.

O., **Dayton**—City plans sanitary sewers in Mt. Auburn Dist. E. O. Eichelberger, city engr.

O., **Hamilton**—City plans sewers in portions Hanover and 11th Sts. and Shuler Ave. F. F. Weaver, city engr.

O., **Lima**—City election in Nov. to vote on $155,000 bond issue to build relief sewers. C. Bryson, city engr. Noted Sept. 13.

O., **Piqua**—City plans sewers in portions Vine St. and several alleys. A. Schroeder, city engr.

O., **Salem**—City having plans prepared for sewer in portions Park St. B. M. Finch, city engr.

O., **Tiffin**—City plans sewers in portions Hedges St. and Grand Ave. J. I. Obenlander, city engr.

Ind., **Laporte** — City having plans prepared southside trunk sewerage system. About $237,781. L. D. Goddard, city engr.

Ind., **Logansport**—City had plans prepared, southeast dist. sewer. About $15,430. H. H. Thompson, city engr.

Mich., **Grand Rapids**—City having plans prepared by Hoad & Decker, engrs., Ann Arbor, sewage-disposal plant.

Mich., **St. Clair Heights**—(Detroit P. O.)—City voted $10,000 bonds, sewerage system. Noted Sept. 27.

Ill., **Knoxville**—City plans disposal plant, including concrete sedimentation tank, sand filter beds, dosing apparatus, under drains and sludge beds. About $29,500. Noted May 10.

Ill., **Rockford**—Council passed ordinance to build sewers in portions Stanley and North Madison Sts. and Hoffman Blvd., sidewalks on 4th and 5th Aves., Cedar, West, and South Winnebago Sts. E. Main, city engr.

Ill., **Rock Island**—City having plans prepared sewerage system in Hill Dist. W. Treichler, city engr.

Wis., **Niagara**—See "Water-Works."

Minn., **St. Paul**—City plans sanitary sewerage system in West St. Anthony Park. About $56,764. O. Clausen, city engr.

Tex., **Navasta**—City plans to install sewerage system.

Tex., **Texarkana** — City voted $50,000 bonds for septic tank for sewerage system. About $100,000; Arkansas side of city will pay half. O. Yenglin, city engr.

Okla., **Miami**—City election Oct. 16 to vote on $20,000 issue for sanitary sewers, and $80,000 for storm sewers. Noted June 28.

Colo., **Greeley**—Council passed ordinance for creation new sewer districts.

Ariz., **Glendale**—City had plans prepared by A. Holmquist, engr., sewerage system. About $30,000. Noted June 21.

Wash., **Grandview**—City plans to install sewerage system.

Cal., **Martinez**—See "Water-Works."

Cal., **Seal Beach**—City election soon to vote on $45,000 bond issue to build sewerage and water-works systems.

Ont., **St. Catherines**—City had plans prepared sewerage system portion Western Hill. W. P. Near, city engr.

BIDS DESIRED

N. J., **North Bergen**—(Weehawken P. O.)—Until Oct. 12, by Town Com., sewer in Tounelle Ave. About $20,000.

O., **Cleveland**—Until Oct. 11, by City, installing sewer, portion East 12th St. R. Hoffman, city engr.

Mich., **St. Joseph**—(Official)—Until Oct. 25, by C. J. McMullen, city clk., for sewage disposal plant, advertised in this issue. Noted Sept. 20.

Mont., **Billings**—See "Streets and Roads."

Cal., **Santa Barbara**—See "Streets and Roads."

Cal., **Santa Barbara**—Until Oct. 18, by A. C. Hall, city clk. outfall sewerage system. About $85,000. Olmsted & Gillelen, 1112 Hollingsworth Bldg., Los Angeles, engrs. Noted Aug. 9.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Conn., **Bridgeport**—City let contract West sanitary trunk sewer, including 3700 ft. 15-in., 700 ft. 12-in. and 1100 ft. 8-in. tile pipe, to L. Petrossi, 39 Woodbridge St., Hartford.

★Conn., **Stamford**—Town let contract, sewage-disposal plant to Frank Palmer, Stamford. Noted Sept. 13.

★N. C., **Belmont**—City let contract, sanitary sewerage system to J. B. McCrary Co., Atlanta, Ga., $20,000. Noted Aug. 23.

★La., **Lafayette**—City let contract sanitary sewers and sewage disposal plant to F. C. Youmans Co., Houston, $80,817. Noted Aug. 30.

Ind., **Hammond**—City received low bids for pump, Calumet Ave. sewer, from United Constr. Co., $22,100; Nejdl & Greenwald, Robertsdale, $26,000.

★Ill., **Summit**—(Official)—City let contract improving sewerage system to F. J. Lambert, Summit, $15,802. Noted Sept. 20.

★Wis., **Milwaukee**—City let contract sewer in portion Lake St., to Wisconsin Constr. Co., 1000 Humboldt Ave., $100,113. Noted June 28.

★Mo., **Kansas City**—City let contract, sewer in Dist. No. 356 to Halpin-Dwyer Constr. Co., Kansas City, $119,000. Noted Sept. 13.

★Ore., **Astoria**—City let contract Scow Bay sewer to Coluccio & Moceri, 1642 Lane St., Seattle, $43,900. Noted Sept. 27.

★Cal., **San Diego**—City let contract sanitary sewerage system, Ocean Beach Dist., to J. Kennedy, Washington Bldg., Los Angeles, $92,394. Noted Sept. 27.

★Cal., **Santa Barbara**—City let contract 12-in. vitr. pipe sewers in Salispuedes St., and 14 inlets to J. T. Cornwall, Santa Barbara, $18,128.

★Que., **Verdun**—City let contract building sewers and sidewalks to M. J. Stack Paving & Contg. Co., Ltd., 167 McCord St., $50,000.

★Ont., **Toronto**—Bd. Control let contract Rosedale Creek sewer from high level pumping station to Russell Hill Rd. to Godson Contg. Co., Ltd., Manning Chambers, $150,000. Noted Aug. 30.

★Ont., **Toronto**—(Official)—City let contract sewer on Yonge St. as follows: Sect. 1, McDonald & Nicholson, $24,100; Sects. 2 and 3, Commissioner of Wks., $66,900 and $12,815, respectively. Noted Sept. 20.

BRIDGES

Proposed Work

N. Y., **Bronx**—Dept. Bridges, Municipal Bldg., having plans prepared by Stoughton & Stoughton, archts., 96 5th Ave., for steel and iron bridge over Bronx Pkway. About $250,000.

Del., **Wilmington**—New Castle Co. plans to build new rein.-con. bridge on Washington St. About $150,000.

Va., **Newport News** — Washington-Newport News Short Line plans to build several bridges, including double leaf bascule span over James and Nansemond Rivers, to connect Newport News to Pig Point; also over southern branch Elizabeth River, near Navy Yard. F. S. Gannon, 55 Liberty St., New York City, pres.

Va., **Richmond** — City preparing plans 2000-ft. steel and iron bridge, 28-ft. over all, over James River, 9th St. C. B. Bolling, city engr.

Fla., **Jacksonville**—See "Streets and Roads."

Ind., **Anderson**—(Official)—Madison Co. receiving bids about February for 492-ft. concrete bridge with 30-ft. roadway over White River on 9th St. About $80,000. Noted Sept. 20.

Mich., **Detroit**—City election Nov. 6 to vote on $3,000,000 bonds to build Belle Island rein.-conc. bridge, length bridge proper, 2200 ft., bridge and approaches 3500 ft., width of roadway, 59 ft., sidewalks, 12 ft., total width, 86 ft., 30 ft. maximum span, number spans, 19. Noted June 14.

Ill., **Lewiston**—See "Streets and Roads."

Okla., **Sapulpa**—See "Streets and Roads."

Wash., **Pullman**—City plans election to vote on $11,350 bonds to build rein.-con. bridge over Missouri Flat Creek, North Pullman.

Cal., **Porterville** — City voted $30,000 bonds to build bridge over Porter slough. Noted Aug. 23.

Que., **Cartierville**—City having plans prepared by W. C. Thomson, engr., for new rein.-con. bridge. About $200,000.

Bridges (Continued)

BIDS DESIRED

N. J., Somerville—Until Oct. 12, by Bd. Freeholders, Somerset Co., repairing Voorhees Everett, Rocky Hill and School House bridges. J. Doughty, Jr., co. engr.

N. J., Woodbridge—Until Oct. 8, by Bd. Freeholders Middlesex Co., New Brunswick, building rein.-con. bridge over Sucker Brook. A. B. Fox, co. engr.

Pa., Butler—(Official)—Until Oct. 17, by Pennsylvania Pub. Ser. Comn., Harrisburg, building steel bridge on Main St.; advertised in this issue.

Kan., Columbus — See "Streets and Roads."

Wash., Okanogan—Until Oct. 9, by J. D. Hubbard, Clk., Okanogan Co., building 390-ft. Howe Truss span bridge, timber and pile trestle approaches, over Okanogan River near Ellisford Sliding. H. E. Smith, co. engr.

California—(Official)—Until Oct. 15 by State Highway Comn., Sacramento, building 120-ft. rein.-con. bridge over Castle Creek, 45-ft. bridge over Mears Creek, 30-ft. bridge over Flume Creek. A. B. Fletcher, highway engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. Y., Cayuga**—New York Central R.R., New York City, let contract rein.-con. bridge at Barge Canal crossing to Walsh Constr. Co., 141 West 3rd St., Davenport, Ia., $290,000.

N. J., Jersey City—Bd. Freeholders Hudson Co., received low bid improving 14th St. viaduct from Nolan & Hornung Constr. Co., West Hoboken, $62,471. Noted Sept. 13.

★**Ky., Owensboro**—Daviess Co. let contract building 16 bridges to Vincennes Bridge Co., Vincennes, Ind., and Champion Bridge Co., Wilmington, O., $80,000.

★**Mich., Mason** — See "Streets and Roads."

★**Ill., St. Joseph**—(Official)—Champaign Co., Urbana, let contract 110-ft. steel bridge, as follows: superstructure to Joliet Bridge & Constr. Co., Joliet, $9598; substructure to Bresse Road Supply Co., $2789. Noted Sept. 13.

★**Wis., Wausau**—City let contract building 200-ft. rein.-con. bridge over Wisconsin River to Wausau Iron Wks., Wausau, $75,000. Noted Sept. 13.

★**Okla., Norman**—Cleveland Co. let contract building 3 rein.-con. and 2 steel bridges to Oklahoma Bridge Co., 222 Baltimore Bldg., Oklahoma, $11,741.

★**Wash., Bellingham** — Council let contract rein.-con. arch bridge over Whatcom Creek at Dupont and Prospect Sts., to C. G. Huber, Central Bldg., Seattle, $11,569. Noted July 12.

Cal., San Diego—Bd. Superv., San Diego Co., received low bid building rein.-con. bridge over Los Flores Creek on State Highway from F. Steffgen, Owl Drug Bldg., $13,997.

STRUCTURAL STEEL WORK

BIDS DESIRED

Pa., Butler—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Okla., Norman**—See "Bridges."

REINFORCED CONCRETE

Proposed Work

N. Y., Rochester—See "Industrial Works."
N. J., Newark—See "Industrial Works."
Pa., Pittsburgh—See "Industrial Works."
Del., Wilmington—See "Bridges."
Del., Wilmington—See "Miscellaneous."
Fla., Jacksonville—See "Streets and Roads."
Ind., Anderson—See "Bridges."
Mich., Detroit—See "Bridges."
Wis., West Allis—See "Industrial Works."
Wash., Pullman—See "Bridges."
Cal., Azusa—See "Miscellaneous."
Cal., Los Angeles—See "Industrial Works."
N. S., Annapolis Royal—See "Miscellaneous."
Que., Cartierville—See "Bridges."

BIDS DESIRED

N. J., Woodbridge—See "Bridges."
Kan., Caldwell—See "Water-Works."
California—See "Bridges."
Cal., Manhattan Beach—See "Miscellaneous."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. Y., Cayuga**—See "Bridges."
★**Wash., D. C.**—See "Federal Government Work."
★**Ga., Atlanta**—See "Industrial Works."
★**Wis., Wausau**—See "Bridges."
Minn., Minneapolis—See "Buildings."
★**Okla., Norman**—See "Bridges."
★**Okla., Tulsa**—See "Buildings."
★**Wash., Bellingham**—See "Bridges."
Cal., San Diego—See "Bridges."

Road Builders

There is an important message from the Commanding Officer of the 23rd Engineers—the new highway construction regiment—to you. On pages 625 and 626 of this issue.

Read It

STREETS AND ROADS

Proposed Work

Mass., South Boston—(Boston P. O.)—City approved order to lay out and construct portion Alger St. About $36,000.

N. Y., Albany—E. Duffey, state highway comr., 55 Lancaster St., received no bids, building and improving highways in various counties. Noted Sept. 6.

N. Y., Buffalo—City plans paving portion Walnut St., asphalt on concrete foundation. G. H. Norton, city engr.

N. Y., Johnson City—Village plans paving portions Willow St., Corliss, Grand and Carhart Aves., concrete.

New Jersey—(Official)—State Highway Comn., Trenton, rejected paving 4000 sq.yd. surface pavement, concrete. New bids. Noted Sept. 13.

N. J., Burlington—Burlington and Florence twps. plan to improve 4 mi. River Rd. Address E. E. Mount.

N. J., Jersey City—City plans improving portions De Kalb Ave., Van Cleef St. and Germania Ave., bituminous, concrete base; Dwight St., asphalt, concrete base. C. A. Van Kuren, city engr.

N. J., West New York—(Weehawken P. O.)—Town plans paving and improving portion Van Buren Pl. About $10,000.

Pennsylvania — State Highway Comn., Harrisburg, plans highway between Phila. and Morrisville; also 10-mi. cement road in Lawrence Co. F. B. Black, state highway comr.

Va., Abingdon — Washington Co. having plans prepared for road connecting Big Creek and Fish Dam Sections.

Va., Richmond—Henrico Co. plans to appropriate $10,000 to improve Petersburg turnpike.

N. C., Charlotte—City election Oct. 10 to vote on $275,000 bond issue to improve roads.

N. C., Northwilkesboro—Town Council authorized $60,000 bond issue to improve streets.

N. C., Raleigh—City sold $50,000 bonds to improve streets. E. R. Pace, city engr.

S. C., Gaffney—Cherokee Co. Highway Comn. will receive bids in February or March for road work through county including portions of National Highway. About $225,000 available from proceeds of bond issue and $17,000 from Federal Aid. Noted Apr. 19.

Fla., Jacksonville—City and Duval Co. plan to issue bonds for improving and widening county road from city limits to state camp; also building concrete bridges at 104th St. and over McGirts and [illegible] Creeks. G. D. Ackerly, city clk. [illegible] Meggs, chn. co. bd.

Fla., Kissimmee—Osceola Co., St. [illegible] Dist. plans organizing road and bridge [illegible] trict and issuing $275,000 bonds to [illegible] concrete highway from here to Bar[illegible] and from Ashton to east co. line.

Fla., Pensacola—Escambia Co. Bd. of Comrs. will create road district comp[illegible] 12 precincts of the city and plans ele[illegible] to vote on bond issue to pave navy yard [illegible] between Bayou Chico and Bayou Gr[illegible] About $90,000.

Fla., Quincy—City election Oct. 9 to vote on $18,000 bond issue to pave streets.

Ala., Bay Minette — Baldwin Co. [illegible] $75,000 bonds to build roads. Noted Sept. 13.

Ala., Montgomery—County Bd. of Revenue plans to improve roads between here and Camp Sheridan. About $20,000 will be expended. R. H. Jones, pres.

Tenn., Knoxville—See "Water-Works."

Tenn., Ridgely—City plans walks on both sides of principal streets; $10,000 bonds voted for work.

Ky., Central City—City plans to improve with state aid, Broad and other streets, macadam and rock asphalt.

O., Akron—City plans paving, grading, curbing, building walks and sewers on portions West North and Grand Sts., South Martha, East and Rhodes Aves. E. A. Zeisloft, city engr.

O., Ashland—Ashland Co. sold $168,000 bonds to improve Market Rd. No. 3 and 10, inter-county highway Nos. 140 and 142. H. C. Westover, co. aud. Noted Sept. 13.

O., Bay Village—(Official)—Village to sell $18,000 bonds Oct. 15 to improve streets. A. L. Miller, clk.

O., Cleveland—Council passed ordinance to issue $30,000 bonds to improve portions 9th St. R. Hoffman, city engr.

O., Columbus—City Council passed ordinance to improve and pave portion 11th Ave. H. Maetzel, city engr.

O., Columbus—City plans to issue $200,000 additional bonds for street improvements. H. Maetzel, city engr. Noted Sept. 6.

O., Lakewood—City election in Nov. to vote on $500,000 bond issue to repave Clifton Blvd., Detroit Ave. and West Madison Ave. E. A. Fisher, city engr.

O., London—City election Nov., to vote on $30,000 bond issue to pave various streets. M. McCafferty, city engr. Noted July 19.

O., Troy—Miami Co. to sell $23,500 bonds Oct. 29 to build, improve and repair portion Miami St. C. N. Peters, aud.

Ind., Columbus—(Official)—Bartholomew Co. rejected bids building 22,368 ft. gravel roads, Flatrock and German Twps. W. H. Scott, aud. Noted Sept. 13.

Mich., L'Anse—Baraga Co. soon lets contract, 40 and 50-mi. highways. About $400,000. M. Boetsch, clk.

Mich., St. Clair Heights—(Detroit P. O.)—City voted $30,000 bonds to pave streets.

Ill., Lewiston—Fulton Co. plans to spend $150,000 to build roads and bridges.

Ill., Rockford—Winnebago Co. election soon to vote on $145,000 bond issue to improve road from here to Boone Co. line.

Ill., Savana—Mason Co. plans to build hard-surface road, 15 ft. wide. About $16,000. State to appropriate half of sum.

Ill., Sullivan—Village plans paving State, B'way. and County Sts., vitr. brick, 3-in. concrete foundation. About $76,000.

Ill., Waukegan—City plans paving portion Market St., brick, to a width of 25 feet. About $38,093. M. J. Douthitt, city engr.

Wis., Green Bay—Brown Co. sold $175,000 bonds to build roads. R. B. Vickery, co. clk. Noted Sept. 20.

Ia., Des Moines—City plans paving portions Carpenter Ave. A. Hands, city engr.

Ia., Seymour — (Official) — City received no bids building sidewalks, street and alley crossings. J. W. Lowry, city clk. Noted Sept. 13.

Minn., Stillwater—Washington Co. plans to build State Rd. No. 3 with state aid; about $15,000.

Kan., Ft. Scott—Bourbon Co. plans to build Richard Rd., from Hornaday Bridge to Glenn Campbell farm, 6 mi.

Kan., Kansas City—Wyandotte Co. plans to repave Parallel Rd., 2½ mi.; Kaw Valley Rd., 5½ mi. O. K. Williamson, co. engr.

Streets and Roads (Continued)

Neb., Holdrege—City soon lets contract paving portions East and West Aves. About $10,000.

Mont., Great Falls—City plans paving, grading, draining, etc., 6th St. About $26,000. L. B. Evenson, city engr.

Mo., Benton—Scott Co. sold $50,000 bonds to build roads. Noted Aug. 23.

Mo., New London—Ralls Co. election defeated $250,000 bond issue for building 150-mi. hard surface roads. Noted Aug. 30.

Mo., Springfield—Green Co. voted $10,000 bonds to improve 15-mi. road in Galloway Special Rd. Dist. L. Luster, atty. Noted Sept. 6.

Arkansas—State Highway Dept., Little Rock, had plans prepared for Jefferson Highway from Harrison to Newton Co. line.

Ark., Prescott—Nevada Co. Comrs. had plans prepared by State Highway Comn., Little Rock, for road from Prescott to Little Missouri River, 8 mi., gravel. About $47,000.

Texas—State Highway Dept., Austin, plans short-line highway between Antonio and Houston.

Tex., Beaumont—Jefferson Co. plans to build Beaumont-Houston Rd., running from here to Liberty Co. line, via China and Nome; to be part of Jefferson Highway from New Orleans, La., to Winnipeg, Can. Also road from Voth through Beaumont to Port Arthur and Sabine. This road will connect with others leading into Kansas City, Mo. State Highway Comn. will pay part of cost of work.

Tex, Burnet—Burnet Co. election Oct. 20 to vote on $100,000 bonds to build roads, Precinct No. 4.

Tex., Clairmont—Kent Co., Precinct No. 1, voted $100,000 bonds to build roads.

Tex., Galveston—City plans to fill crest on boulevard between 25th and 39th Sts., mudshell on sand bedding. About $57,500. A. Willits, city engr.

Tex., Omaha—City voted $35,000 bonds for street improvements. Address the Mayor.

Tex., Palestine—Anderson Co. secured R. Q. Mills highway and plans to build. The road will extend from Corsicana to Comanche. Noted Sept. 27.

Tex., Seminole—Gaines Co. election soon to vote on $250,000 bonds to build good roads.

Tex., Victoria—City plans paving streets; $100,000 bonds recently voted for work.

Okla., Hugo—Choctaw Co. plans election Oct. 13 to vote on $50,000 bond issue for improving roads in Wilson Twp. Noted June 7.

Okla., Sallisaw—Sequoyah Co. election Oct. 22 to vote on $18,000 bond issue for roads and bridges in Paw Paw Twp. and $20,000 bond issue for some work in Campbell Twp.

Okla., Sapulpa—Creek Co. election soon to vote on $800,000 bond issue to build roads and bridges.

Idaho, Cœur d'Alene—Kootenai Co., Fourth of July Canyon, created highway improvement district and plans to vote on $25,000 bond issue, which, together with $50,000 from Federal Government, $50,000 from state and $50,000 from Shoshone Co., makes total of $150,000 for work in district.

Utah, Salt Lake City—Lincoln Highway Assn. plans road over Great Salt Lake Desert to connect road leading into Nevada near Deep Creek Mountains. About $15,700.

Wash., Cheney—City election Oct. 8th to vote on bond issue to improve 36 blocks.

Wash., Colfax—Whitman Co. Comrs. plan Ewan-St. John highway, 23 mi. hard surface. About $200,000.

Wash., Everett — (Official) — Snohomish Co. rejected bids building permanent highways Nos. 32 and 33. M. Weatherbee, co. aud. Noted Sept. 13.

Wash., Pullman—City plans election soon to vote on $11,350 bond issue for paving streets and bridges.

Wash., Ritzville—Adams Co. Comrs. plan to build permanent highway from here to Grant co. line.

Wash., Seattle—City had plans prepared paving Elliott Ave., 524,000 yd. earthwork, 42,000 sq.yd. 5-in. concrete base, asphalt, 14,000 sq.yd. 6-in. concrete base, 1900 sq.yd. asphalt top, 38,000 sq.yd. concrete paving, 6-in. base, 66,000 sq.yd. 6-in. concrete base, brick block, 24,000 sq.yd. 7-in. concrete base, etc. About $700,000. A. H. Dimock, city engr.

Ore., Klamath Falls—City plans to pave Conger Ave., ½ mi., including 5-ft. concrete walks along one side. About $25,765.

Cal., Colusa—Colusa Co. had plans prepared highway between Princeton, Colusa and Grimes, 27 mi., 10 ft. wide, concrete. About $200,000.

Cal., Los Angeles—City rejected bids improving 1st St. New bids. A. C. Hansen, cty engr. Noted Sept. 13.

Cal., Richmond—City plans improving portions 19th St. A. C. Faris, clk.

Cal., Tulare—City rejected bids paving 2.3 mi., concrete. Noted Aug. 30.

BIDS DESIRED

N. Y., Brooklyn—(Official)—Until Oct. 10, by L. H. Pounds, boro. pres., regulating and paving, asphalt, 6-in. concrete base, portion roadway Hopkinson, Thatford and 20th Aves., Montgomery, Van Brunt, 68th and 78th Sts., regulating and repaving, grade 1 granite, 6-in. concrete base, portion Van Brunt St., regulating, curbing where necessary, and paving, asphalt, 6-in. concrete base portion 80th St.

N. Y., S. I., St. George—Until Oct. 8, by C. D. Van Name, boro. pres., repaving Old Manor Rd.

N. J., Highland Park—Until Oct. 8, by boro. grading 8th Ave., 1st Ave., Magnolia and Montgomery Sts. R. B. Craig, clk. Noted Sept. 20.

Fla., Tallahassee—Until Oct. 15, by Leon Co. Comrs., Woodville Rd., 6 mi. rock; Chaires and Capitola Rd., to Jefferson Co. line, 4 mi., sand clay. B. E. Reed, co. engr.

Fla., Tampa—Until Oct. 16, by W. P. Culvreath, clk. Hillsborough Co. Comrs. to construct 54 mi. hard surface roads through Pasco, Polk, Manatee and Pinellas Cos.

Louisiana—(Official) — Until Oct. 8, by State Highway Dept., New Orleans, following highway work: Baton Rouge-New Orleans Rd., Ascension Parish, 27.48 mi.; Lafayette-New Iberia and Lafayette-Crowley Rds., Lafayette Parish, 12.2 mi. D. Buie, state highway engr.

Tenn., Johnson—Until Oct. 16, by W. O. Dyer, city mgr., paving and installing sewer, Dist. No. 24, 11,440 sq.yd. paving, 8580 lin.ft. curb and gutter, 8630 6- to 8-in. sewers; Dist. No. 32, 7473 sq.yd. paving, 5680 lin.ft. curb and gutter, 5780 6-8-in. sewers and 1200 lin.ft. storm sewers; Dist. No. 33, 3540 sq.yd. paving, 2896 lin.ft. curb and gutter, 2608 6- 8-in. sewers; Dist. No. 34, grading, 3000 sq.yd. paving, 2692 lin.ft. curb and gutter, 2426 6- 8-in. sewers. P. T. McDonald, city engr.

Ohio—Until Oct. 12 by State Highway Dept., Columbus, building roads in various counties as follows:

O., Cleveland—Until Oct. 10, by City improving and paving portions Edgewater Cliff Drive, West Blvd., West 82nd and West 105th St. R. Hoffman, city engr.

Columbus, Ohio—The Ohio Highway Department will open bids October 12 for the following work: Ashland Co., Sect. "A," Columbus-Wooster Rd., monolithic brick, 1.54 mi., cost $44,170; Sect. "A," Ashland-Norwalk Rd., monolithic brick, 4.72 mi., $11,057; Sect. "G," Savannah-Vermillion Rd., monolithic brick, 4.08 mi., $84,646; Clermont Co., Sect. "K-1," Cincinnati-Chillicothe Rd., water-bound macadam, 2.04 mi., $19,403; Sect. "N-1," Milford-Hillsboro Rd., water-bound macadam, 0.98 mi., $11,398; Darke Co., Sect. "A-1," Dayton-Greenville Rd., concrete, 2.63 mi., $66,180; Highland Co., Sect. "K," Hillsboro-Piketown Rd., bituminous macadam, 2.40 mi., $22,729; Huron Co., Sect. "L," Bellevue-Norwalk Rd., monolithic brick, 1.68 mi., $42,618; Knox Co., Sect. "K," Columbus-Wooster Rd., rein.-con., 1.61 mi., $49,093; Lucas Co., Sect. "J," Toledo-Napoleon Rd., concrete-macadam, 4.48 mi., $73,334; Sect. "K," Toledo-Napoleon Rd., concrete-macadam, 3.73 mi., $85,801; Mahoning Co., Sect. "B," Youngstown-Lowellville Rd., brick, 1.50 mi., $53,791; Sect. "Y," Canfield-Poland Rd., water-bound macadam, 1.88 mi., $23,088; Morgan Co., Sect. "H," McConnellsville-Athens Rd., water-bound macadam, 2.15 mi., $46,552; Seneca Co., Sect. "A," Tiffin-Fostoria Rd., brick, 1.55 mi., $44,400; Stark Co., Sect. "B-2," Canton-New Franklin Rd., brick, 1.17 mi., $44,483; Summit Co., Sect. "R," Arkon-Canton Rd., brick, 2.08 mi., $64,501; Sect. "N-1," Cleveland-Massillon Rd., brick, 1.80 mi., $57,854; Wayne Co., Sect. "Q," Wooster-Canal Dover Rd., monolithic brick, 1.17 mi., $23,823; Sect. "A," Wooster-Millersburg Rd., monolithic brick, 0.88 mi., $16,074; Sect. "A," Orrville-Southern Rd., monolithic brick, 2.35 mi., $53,121; Williams Co., Sect. "L," Bryan-Pioneer Rd., water-bound macadam or bituminous macadam, 3.81 mi., $69,763; Jefferson Co., Sect. "N-2," Steubenville-Cambridge Rd., brick, 1.83 mi., $71,719.

O., Germantown—Until Oct. 10, by village, paving West Market St., tarvia bound macadam, and combined curb and gutter. C. A. Eby, clk.

Kan., Columbus—Until Oct. 18, by L. Mobley, chn. Cherokee Co. Comrs., 10-mi. benefit dist. road, involving 33,261 cu.yd. excav., 1 16-ft., 3-span concrete bridge and 25 concrete culverts. C. M. Cooper, co. engr. Noted Aug. 23.

Mont., Billings—Until Oct. 16, by J. M. Bresnahan, city clk., 13,360 sq.yd. paving, together with concrete gutters and sewers in Impvt. Dist. No. 29. E. M. Schneckenberger, city engr.

Mo., Stanberry—(Official)—Until Oct. 8, by C. A. Greenice, city clk., paving, curbing and building gutters, portions Park and Locust Sts. Black & Veatch, Inter-State Bldg., Kansas City, Mo., engrs. Noted Sept. 20.

Ark., Clarendon—Until Oct. 22, by Monroe Co. Rd. Impvt. Dist., Mo., for 22-mi. road through Brinkley forming part Little Rock-Memphis Highway, including 88,000-cu.yd. grading, 34,500-cu.yd. gravel, 7000-cu.yd. concrete, 111,000-sq.yd. bituminous carpet, 1800-cu.yd. rein.-con. in bridges and 1000-lin.ft. pipe culverts. Parkes Eng. Co., Citizens Bank Bldg., Pine Bluff, engrs. Noted May 10.

Ark., Little Rock—(Official)—Until Oct. 10, by City, paving 40,000 sq.yd., asphalt or concrete, Impvt. Dist. No. 261. Lund & Hill, 527 Southern Trust Bldg., engrs.

Idaho, Challis—Until Oct. 8, by E. J. Michaels, clk. Custer Co., widening slope Double Springs Pass Rd.

Idaho, Nez Perce—Until Oct. 8, by Lewis Co. Comrs. building 8500 ft. of 16-ft. highway known as Nezperce-Green Creek highway. J. B. White, clk.

Cal., Santa Barbara—Until Oct. 24, by A. C. Hall, city clk., improving Salsipuedes and Carpenteria Sts., including 6-in. concrete pavements, oil and screenings surfaces, 6-, 8- and 12-in. vitr. pipe sewers, 24-in. concrete pipe drains, etc. A. B. Cook, city engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Massachusetts — State Highway Dept., Boston, let contract for road in Ashby to D. J. Damon, Ashby, $24,614.

Massachusetts — State Highway Dept., Boston, received low bids for roads in Egremont and Sheffield, from Perini & Co., Ashland, $52,315; L. C. Fay & Co., 318 Main St., Springfield, $54,310; Hamlin & Nelson, Salem, $56,426. Noted Aug. 30.

Massachusetts — State Highway Dept., Boston, received low bids for following highways: (a) Braintree, (b) Deerfield, (c) Westford, E. C. Sargent, Adams Bldg., Quincy, (a) $17,719; W. F. Loud & Sons, Quincy (a) $18,076; Perini & Co., Ashland, (b) $22,655, (c) $10,483; Middlesex Constr. Co., Medford Hillside, (b) $29,385; J. E. Watkins, Amesbury, (c) $10,672.

★Mass., Malden—(Official)—City let contract 4200 sq.yd. granite block pavement on concrete base to Simpson Bros., 166 Devonshire St., Boston. Noted Aug. 30.

★Mass., Springfield—City let contract paving North End and Abbey St. bridges to Jennison-Wright Co., Detroit, Mich., $19,000.

Connecticut—State Highway Comn., Hartford, received low bids following road work: Branford Twp., (a) 10,765 lin.ft. rein.-con. paving, Short Beach Rd., (b) 11,900 lin.ft. rein.-con. paving Montowese St. and Indian Neck Rd. from C. W. Blakeslee & Sons, 58 Waverly St., New Haven, (a) $40,821 (b) $54,916 (c) $68,009; L. Suzio Constr. Co., State and Broad St., Meriden, (a) $44,691 (b) $60,725 (c) $76,082. Stratford Twp., $7300 lin. ft. concrete or Hassam paving, Barnum Ave., Connecticut Hassam Paving Co., 902 Chapel St., New Haven, $40,518; Maher & Sprague, 185 Church St., New Haven, $43,344. Woodbury Twp., 8180 lin.ft. gravel road, Bethlehem and Watertown Rds., J. DeMichiel, 58 High St., Torrington, $28,908; H. Sanford Osborn,

Streets and Roads (Continued)

Redding Ridge, $30,240; Mascetti & Holley, 561 South Main St., Torrington, $30,716. North Haven Twp., 2066 lin.ft. concrete paving, Quinnipiac Ave., R. D. Daley Co., 6 Church St., New Haven, $8,250; C. W. Blakeslee & Sons, 58 Waverly St., New Haven, $8288; Maher & Sprague 185 Church St., New Haven, $9222. Noted Sept. 27.

N. Y., Brooklyn—(Official)—M. M. Connolly, boro. pres. (Queens Boro.), received low bids regulating and repaving portion Jamaica Ave. from Uvalde Asphalt Paving Co., 1 B'way., New York City, $93,783; Borough Asphalt Co., 1301 Metropolitan Ave., $95,094. Noted Sept. 20.

N. Y., Buffalo—City received low bid repaving Wohler Ave., asphalt, from German Rock Asphalt Co., Inc., Morgan Bldg., $22,980.

★**N. Y., Rochester**—City let contract asphalt paving to Ribstein-Holler Co., 16 State St., Main St., $15,311; Chilli Ave., $16,344; Rochester Vulcanite Pavement Co., Exchange Pl. Bldg., Penhurst St., $21,155. Noted Aug. 23.

N. Y., Rochester—City received low bids paving Werner Park, asphalt, from Rochester Vulcanite Pavement Co., Exchange Pl. Bldg., $12,168, and Whitmore, Rauber & Vincinus, 279 South St., $12,618. Noted Aug. 23.

★**N. J., East Orange**—City let contract paving Woodland Ave., asphalt block, to Chapman & Lawrence, 26 Clinton St., Newark, $30,000.

★**N. J., East Orange**—City let contract resurfacing portion South Clinton St., bituminous concrete, to Uvalde Asphalt Paving Co., 1 Bway., New York City. Noted June 14.

★**N. J., Jersey City**—Bd. Freeholders, Hudson Co., Jersey City, and Essex Co., Newark, let contract repaving bridge on Lincoln Highway over Passaic River to R. J. Emmer, Weehawken. About $29,900.

★**N. J., Kearny**—(Arlington P. O.)—Town Council let contract paving Midland Ave., warrenite on concrete foundation, to Maher & McNicholas, Passaic Ave.

N. J., Newark—City received low bids paving (a) North 6th St., 11,100 sq.yd. asphalt, 6-in. concrete foundation; (b) Geneva St., 2900 sq.yd. asphalt, 6-in. concrete foundation; (c) North Canal St., 2700 sq.yd. granite, concrete foundation; from Newark Paving Co., 133 1st St., (a) $33,831, (b) $10,382, (c) $15,235; Northern Constr. Co., Wiss Bldg., (a) $36,244, (b) $10,459; Standard Bitulithic Co., Essex Bldg., (a) $36,066, (b) $16,210; R. Sangiovanni, 80 Hoyt St., (c) $16,210; A. J. Milmoe, 83 Littleton Ave., (c) $16,297. Noted Sept. 20.

★**Pennsylvania**—(Official) — State Highway Comr. let contract 2 roads, McKeon Co., to Larson & Pascuzzi, Kane, $144,250; L. Schultz & Sons, Fredonia, N. Y., $43,777. Noted Aug. 23.

★**Pa., Phila.**—Bureau Highways let contract asphalt paving to Mack Paving & Constr. Co., Nicetown Lane and Whitaker Ave., and Barber Asphalt Co., Land Title Bldg., $14,395, and $27,950 respectively.

Md., Elkton—Cecil Co. received low bid building 1½-mi. concrete road from Millers Corner to Elk Mills from E. R. Sutton, $30,000.

★**W. Va., Edgewood**—(Wheeling P.O.)—(Official)—City let contract 25,000 sq.yd. paving 2-in. warrenite, 6-in. concrete foundation, to Atlantic Bitulithic Co., Va. Railway and Power Bldg., $50,000. Noted Sept. 20.

★**W. Va., Parkersburg**—City let contract paving 20th and 22nd Sts., to Kennedy & Son, Parkersburg. About $16,206 and $10,188, respectively. Noted Sept. 27.

★**N. C., Charlotte**—Mecklenburg Co. let contract building roadway to Camp Green to Noll Constr. Co., 8 East 6th St., Chattanooga, Tenn. Noted Aug. 16.

S. C., Charleston — (Official) — City received low bids paving 8500 sq.yd. concrete from General Road & Drainage Constr. Co., 709 Union Natl. Bank Bldg., Columbia, $1.815 per sq.yd.; Simons Mayrant Co., 18 Broad St., $1.84; McCrady Bros. & Cheves, Inc., 4 Broad St., $1.94. Noted Sept. 20.

★**Fla., Kissimmee** — Osceola Co. Comrs. let contract road from Kissimmee to Polk Co. line to be connecting link Dixie Highway between Jackson and Tampa, 278 mi., brick, cement grouted, 16 ft. wide from Kissimmee to fair grounds, balance 9 ft. wide, to Alabama Paving Co., American Trust Bldg., Birmingham.

★**Fla., Miami**—City let contract paving portions Waddell and 14th Sts., and Biscayne Dr., Contr. No. 16, also Le Gro, H and Columbia Aves., Contr. No. 17, to Municipal Constr. Co., Empire Bldg., Atlanta, Ga., $31,857 and $42,228 respectively; curbing and guttering on same contracts to J. F. Morgan & Co., $13,320 and $38,339 respectively; paving, grading and guttering in Miramar to Freedlund Constr. Co., Miami, $43,839. Noted Sept. 13.

★**Ala., Eutaw** — (Official) — Green Co. Comrs. let contract building road from here to Five Points to F. D. Harvey & Co., Memphis, Tenn. Noted Sept. 6.

★**Tenn., Hohenwald** — (Official) — Lewis Co. Comn. let contract paving 30 mi. road to Humphrey & Schenderman, Hohenwald. $16,500. Noted Sept. 27.

★**Ky., Owensboro**—Fiscal Court Daviess Co., let contract to Miller & Woodruff, paving Ware St., $15,562, Graves Lane, $20,108, Pleasant Valley, $12,348; all of river gravel. M. G. Moore, Hopkinsville, Livermore, Henderson, Boonville, Curdsville, Hardinsburg, Ware, Graves Lane, Pleasant Valley and Hardinburg Rds., concrete, $24,708. Noted Aug. 23.

★**O., Cleveland**—Bd. Control let contract improving and paving portion East 141st St., to Gould & Maybach, 823 East 150th St., intersections of Fairmount, Fairchild, Wilbus and East 107th Sts., to Baldwin Bros. Co., Rose Bldg., about $13,000. Noted Aug. 30.

★**O., Hudson**—City let contract paving College, Bolden and Prospect Sts., bitulithic or concrete foundation, to Warren Bros., 142 Berkeley St., Boston, Mass., $27,000.

★**Ind., Anderson**—(Official)—Madison Co. let contract building 2 rocmac roads, Monroe Twp., to J. R. Reason & Co., Pendleton, $29,275; Sullivan & Sullivan, Alexandria, $38,250. Noted Sept. 13.

Ind., Indianapolis—Bd. Pub. Wks. received low bids paving 46th St., (a) asphalt (b) bituminous concrete, from Republic Constr. Co., 1614 Merchants Bank Bldg., (a) $4.85 (b) $4.65; American Constr. Co., 108 North Delaware St., (a) $5.05, (b) $4.80.

★**Michigan** — (Official) — State Highway Comn., Lansing, let contract gravel road from Homer to Mt. Haley Twp. to Peterson, Guilding & Allsuede, Sanford, $23,950.

★**Mich., Judith Gap**—City let contract cement sidewalks, 34 blocks, to J. A. Gudgel & Co., Kalispell, Mont., $20,000.

★**Mich., Mason**—Ingham Co. let contract grading road 9½ mi. and constructing culvert to C. V. Walker, Fremont, $63,460.

★**Ill., Danville**—Vermilion Co. let contract paving in Carroll Twp. and village of Indianola, bituminous asphalt, to M. H. Lewis, Hoopeston, $50,000.

★**Wis., Racine**—(Official)—City let contract paving to Western Impvt. Co., 840 Racine St., $2.25 per sq.yd. sheet asphalt. Noted Sept. 13.

★**Minn., Minneapolis** — (Official) — City will widen portion 9th and 8th Sts. by day labor. About $236,539, and $200,000 respectively. Noted Sept. 20.

★**Minn., Minneapolis**—City will grade, surface and build walks and curbs on portions Park Rd. by day labor. About $125,000. F. W. Cappelin, city engr.

Kan., Columbus—Cherokee Co. received low bids for Blake Rd. from E. F. Wilcox, Kansas City, $55,416; D. E. Dorsey, Weir City, $58,761.

★**Neb., Omaha**—Douglas Co. Comrs. let contract resurfacing West Dodge Rd. to Bauer & Johnson, 44½c. per sq.yd.

★**Arkansas**—State Highway Comn., Little Rock, let contract road to Camp Pike, warrenite, to M. D. L. Cook, 315 Southern Trust Bldg. About $125,398.

★**Tex., Floydada**—City let contract building 4 blocks pavement, concrete base, asphalt filler, to Jordan Paving Co., Plainview, Tex. About $40,000.

★**Tex., New Braunfels**—City let contract paving streets to Uvalde Rock Asphalt Co., San Antonio, $25,000.

★**Tex., Victoria**—City let contract paving 60,581 yd. rock asphalt, to Uvalde Rock Asphalt Co., 411 Sewearingen-McCraw Bldg., San Antonio, $25,000. Noted Aug. 21.

Okla., Ada—City received low bids paving portions East Main St., blocks, from Western Paving Co., Oklahoma City, $1.98 per sq.yd., Bert Hahn Constr. Co., Ada, $2.07. E. P. McCormick, Tulsa, $2.11.

★**Colo., Denver**—(Official)—Boulder and Adams Co. Comrs. let contract paving 5-mi Federal Blvd., north of city limits, tarvia Finley method application, to Kelly & Sheeley, $40,000. Noted Sept. 6.

★**Ariz., Phoenix**—City let contract paving, grading, curbing, guttering and installing sewers on East Moreland St. to Southwestern Contr. Co., Phoenix.

Wash., Seattle—King Co. Comrs. received low bid grading and graveling road between Renton and Renton Junction from E. J. McQuaide, Seattle, $14,083. Noted Aug. 23.

★**Wash., Seattle**—City let contract paving Latona and 14th Ave. to R. G. Stevenson, 1327 Ewing St. About $27,601 and $8153 respectively; Valley St., to F. N. Badolato, $9462; grading Court St. and other streets to Espeland Bros., $13,615.

★**Wash., Vancouver**—Clarke Co. Comrs. let contract paving 7800 ft. of Fourth Plain Rd., involving 16 ft. bitulithic on 4-in. concrete base, to United Constr. Co., Northwest Bank Bldg., Portland, Ore. About $27,027. Noted July 5.

★**California**—(Official) — State Highway Comn., Sacramento, let contract 7.2 mi. grading in Humboldt Co., between Del Rio and Fortuna, to A. Robinson & R. R. Smith, Fortuna. Noted Sept. 20.

★**Cal., San Francisco**—City let contract concrete sidewalks on Chestnut St. to F. O'Shea, San Francisco, about 17c. per sq. ft., improving Alvarado St. to J. M. Smith, 407 11th St.; about $1.50 per cu.yd., excava.; $2.90 per ft., 8-in. sewer; $80 each, brick manhole; $0.85 per ft., armored concrete curbs; $0.14 per sq.ft. concrete sidewalks; $0.41 per sq.ft. vitr. brick pavement; $0.25 per sq.ft. asphalt pavement; improving Flood Ave. and Clayton St. to Flinn & Treacy, 1st Natl. Bank Bldg. About $0.80 per ft., concrete curb; $0.26 per ft., asphalt pavement; $0.45 per sq.ft. basalt-block pavement; $1.25 per ft., granite curbs; $0.14 per sq.ft., concrete sidewalks.

★**Cal., Ventura**—Bd. Superv. let contract surfacing 1,193,000 sq.ft. concrete pavement on Telegraph Rd. to Rooney-Wyckoff Co., Consolidated Realty Bldg., Los Angeles. About $22,667. Noted Sept.20.

★**Que., Verdun**—See "Sewers."

★**Que., Yamachiche**—Village let contract macadam paving to A. Carrier, Ste. Tite, $20,000.

★**Ont., Windsor**—City let contract resurfacing Bruce St. to Merlo, Merlo & Ray, 296 Windermere Rd., Walkerville, $14,467.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

Pennsylvania—Pennsylvania R.R. plans to extend its yards at Marietta, including 7 pairs of tracks, about 1 mi. A. G. Shand, Broad St., Sta., Phila., ch. engr.

Georgia—Savannah Electric Co., plans trolley line from Savannah to Port Wentworth. About $100,000. H. C. Foss, Savannah, genl. mgr.

Florida—Jacksonville, Miami & Tampa Interurban Ry. prepared plans for line to connect Jacksonville, Pablo Beach, St. Augustine, Daytona, Miami, Sanford, De Land, Orlando, Kissimmee, Bartow, Lakeland, Tampa and other points. W. S. Alyea, St. Cloud, Fla., gen. mgr.

Kentucky—Lousiville & Nashville R.R. made surveys for 7-mi. extension on Catron's Creek and 1-mi. Slater's Fork, to develop coal mines of Kentemia Corp. W. H. Courtenay, Louisville, ch. engr.

Wisconsin—Minneapolis, St. Paul & Sault Ste. Marie Ry. plans to build line from Rugby Jct., Schleisingerville P. O., to Milwaukee; also build passenger depot and freight house in Milwaukee. About $6,000,000. C. N. Kalk, Minneapolis, ch. engr.

Idaho—Pella-Leffler Short Line Ry., recently incorporated with $300,000 capital stock, plans to build line from Pella to junction on Wabash Ry., about 4½ mi. P. H. Van Gorp, Pella, pres.

Utah—Salt Lake & Utah R.R. plans to build line from Salt Lake City to Eureka, about 50 mi. F. D. Nauman, Salt Lake City, ch. engr.

Washington — See "Industrial Works," Tacoma.

California—See "Miscellaneous," Blythe.

Railways—Steam and Electric (Continued)

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Pennsylvania** — (Official) — Carnegie Steel Co. let contract building 5-mi. double track railroad from Bull Run on Monongahela & Southern branch of Pennsylvania R.R. across deep gulches and through hills to coke plant at Clairton to Gillespie Steel Co., Westinghouse Bldg., Pittsburgh. Work involves 1,200,000 cu.yd. excava., 75,000 cu.yd. concrete and 1700 ft. double-track tunnel.

★**Montana**—Big Hole R.R., Anaconda, let contract building 20-mi. line to connect Divide with mines of Elkhorn Mining Co., to Clifton, Applegate & Toole, 2 North Cedar St., Anaconda.

EXCAVATION AND DREDGING

Proposed Work

Miss., Biloxi—Dredging—City plans to appropriate $25,000 or $30,000 for dredging Back Bay Channel.

Ky., Dixon—Ditch—Webster Co. Drainage Bd. soon receives bids building 4 mi. ditch including dredge work. About $25,000. W. C. Hardwick, vice pres.

Ill., Lewiston — (Official) — Drainage — West Matanzas Drainage & Levee Dist., Fulton Co. received no bids laying 7200 ft. 8-in. tile, Lateral No. 1, 2200 ft. 18-in. tile, Lateral No. 2; 4200 ft. 16-in. tile Ditch No. 4. J. H. Wehner, comr. Noted Sept. 13.

Ark., Jonesboro—(Official)—Drainage—Cache River D. D. receiving bids about Nov. 10, building main ditch, 25 mi. long, 125 ft. wide, 30-mi. laterals, 25- to 45-ft. wide, to drain 110,000 acres, Craighead, Lawrence and Jackson Cos. J. R. Rhyme, Corning, engr. Noted Sept. 20.

Mo., Ash Grove—Excavation—Ash Grove Portland Cement Co. plans to build 20-acre artificial lake. About $60,000.

Mo., Poplar Bluff—Drainage—Inter River D.D. had plans prepared by Morgan Eng. Co., Goodwyn Institution, Memphis, Tenn., for 210-mi. canals and 50-mi. levee to drain 114,000 acres in southeastern Missouri, involving 8,000,000 cu.yd. excav., 2,500,000 cu. yd. levee embankment. About $1,240,000.

Idaho, Idaho Falls—Drainage—City plans to establish drainage district along Sand and Willow Creeks to eliminate flood waters. About $90,000.

Ore., Medford—Irrigation—City voted to establish Medford Irrigation Dist. involving 24,000 acres Rogue River Valley.

Cal., Merced—Irrigation—Merced Co. plans to establish districts to build irrigation and drainage systems. Address E. G. Adams, Livingston.

Cal., Olinda—Irrigation—Happy Valley Irrigation Dist. plans election to vote on $80,000 bonds to extend canal system.

Cal., Richmond—Dredging—City plans to spend $400,000 to improve harbor, $200,000 will be used for dredging, other half for bulkheading, rip rapping and filling. H. D. Chapman, city engr.

Cal., San Diego—Dredging—See "Federal Government Work."

BIDS DESIRED

Ind., Rockport—Ditches—Until Oct. 22, by Spencer Co., building ditches involving 387,000 cu.yd. excav. H. Wells, supt. constr.

Ill., Havana—Ditches—Until Oct. 15, by Bd. Comrs. Garden Special D. D., Mason Co., building ditches, involving 194,342 cu.yd. excavation. J. F. Kreiling, comr.

Ill., Lawrenceville—Ditch—Until Oct. 6, by Lawrence Co. Comrs., rebuilding 6 mi. old ditch, involving 50,000 cu.yd. excava., also 2 mi. new ditch, involving 72,000 cu.yd. excav. G. C. Harvey, Mt. Carmel, engr.

Ia., Boone—Drain—Until Oct. 9, by Bd. Supervs. Boone Co., building Drain No. 168, involving 20,270 ft. 6- to 24-in. tile. J. R. Curry, aud.

Minn., Elbow Lake—Drain—Until Oct. 22, by C. M. Nelson, aud., Grant Co., building Drain No. 29, main open ditch, 3¾ mi. long, bottom width 6 and 8 ft., average depth 9 to 12 ft., involving 124,225 cu.yd. excav., 84,700 ft. 6- to 32-in. tile. H. Dunaway, co. engr.

Minn., Gaylord—Ditch—Until Oct. 12 by Sibley Co., Henderson, building Judicial Ditch No. 8 involving 37,474 ft. 7- to 12-in. tile. About $33,581. F. Heppenstedt, aud.

Minn., Lesueur Center—(Official)—Ditch—Until Oct. 24 by T. F. Dunn, Lesueur Co. aud., building Co. Ditch No. 45, involving 156,545 cu.yd. excav. About $22,830.

Minn., Mankato—Ditch—Until Oct. 19, by Blue Earth Co., building Co. Ditch No. 50, involving 84,432 cu.yd. excav., 81,790 ft. 8- to 38-in. tile. C. L. Kennedy, aud. R. H. Allison, engr.

Minn., St. Peter—Ditch—Until Oct. 16, by Nicollet Co., building Co. Ditch No. 29, involving 26,610 ft. 6- to 20-in. tile. About $10,082. W. H. Holz, co. aud.

Kan., Belvue—Ditches—Until Oct. 8 by Bd. Dir. Bellevue D.D. building drainage ditches and change of channel, Lost and Welch Creek River Dists. V. R. Parkhurst, 627 Kansas Ave., Topeka, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Ill., Paxton**—Ditch—Ford Co. let contract building ditch, subdistrict No. 2, Union D. D., to W. F. Sturenburg, De Kalb, 0.179c. per ft.

★**Cal., Meridan**—Drainage — Sacramento River West Side Levee Dist. and Rec. Dist. No. 70, let contract clearing strip through Butte Slough, to Kenyon & Whitman, Forum Bldg., Sacramento, $100,000.

Cal., Oakdale—Canals—Oakdale Irrigation Dist. will spend $35,000 to build concrete canals and replace flume. Work will be done by day labor. Noted Sept. 20.

INDUSTRIAL WORKS

Proposed Work

R. I., Woonsocket—Tips Motor Co., recently incorporated with $400,000 capital stock, plans to build factory. M. Tips and others, incorporators.

Conn., Bridgeport — United States Airplane Co., recently incorporated, plans to build plant. About $500,000.

N. Y., Brooklyn—R. Freedman, 4185 Fulton St., had plans prepared by E. C. Georgi, archt., 4185 Fulton St., for 1-story, 157 x 220-ft. garage. About $50,000.

N. Y., Brooklyn—Lewis Constr. Co., 361 Fulton St., had plans prepared by S. Millman & Sons, archts., 1780 Pitkin Ave., for 1-story, 105 x 148-ft. brick garage, on Ocean Parkway. About $65,000.

N. Y., Buffalo — Standard Oil Co., 26 Bway., New York City, plans warehouse at Atlas Works, 1103 Elk St. About $100,000.

N. Y., New York—Empire Trust Co. had plans prepared for 4-story, 54 x 94-ft. brick garage at 51-5 Lexington Ave. About $75,000. L. W. Baldwin, 120 Bway., pres. P. J. McKeown, 217 Bway., archt.

N. Y., New York—Fifth Ave. Coach Co., 10 East 102nd St., had plans prepared by J. C. McGuire, engr., 50 Church St., for 4-story, 200 x 400-ft. factory, 133rd St. and Bway. Noted Sept. 27.

N. Y., New York—Schencke Piano Co., 273 Rider Ave., plans 3- to 5-story, 62 x 90-ft. factory, 137th St. and Willow Ave. About $75,000. A. E. Davis, 258 East 138th St., archt.

N. Y., Rochester—Bausch & Lomb Optical Co., 1635 St. Paul St., had plans prepared 5-story, 120 x 400-ft. rein.-con. factory, St. Paul, Lowell and Martin Sts.

N. J., Newark — Newark Gear Cutting Machine Co., 69 Prospect St., plans 4-story, 42 x 50-ft. machine shop, office and pattern storage building. H. E. Eberhardt, pres.

N. J., Newark—J. Oschwald, Plane and Hackett Sts., plans 2-story, 65 x 239-ft. rein.-con. automobile service station. About $55,000.

N. J., West New York—(Weehawken P. O.)—New Process Rubber Co., 488 Bergenline Ave., recently incorporated, plans to build automobile tire factory. About $50,000.

Pa., Phila.—F. A. Poth & Sons soon lets contract 1-story, 44 x 50 ft. boiler house. About $100,000. E. J. Poth, 31st and Jefferson Sts., pres. Chas. Casper, 925 Chestnut St., archt.

Pa., Pittsburgh — American Locomotive Co., Seymore and Beaver Sts., plans 1- and 2-story steel and concrete paint and erecting shops. About $67,500.

Pa., Pittsburgh—J. Mellor & Sons Printing Co., 128 46th St., plans 4-story, steel and concrete addition to plant on 46th and Hatfield Sts.

Pa., Pittsburgh—National Supply Co., Union Bank Bldg., plans to build warehouse, Preble Ave., Adams and Delaware Sts. About $50,000.

Pa., Pittsburgh—Pennsylvania Chocolate Co., 5850 Center St., plans 6-story factory addition at 5850 Center Ave. S. S. Marion, 5 South Front St., pres. Ballinger & Perrot, arcnts., 17th and Arch Sts., receive bids about Oct. 10.

Pa., Reading—Reading Ry. plans roundhouse. About $175,000. S. T. Wagner, Old Colony Bldg., ch. engr.

Md., Sharptown — Eastern Shore Shipbuilding Corp. plans shipbuilding plant. About $150,000. R. R. Livingston, 2 Rector St., New York City, pres. Hamilton & Chambers Co., 29 Bway., New York City, archt.

W. Va., Parkersburg—Kahn & Fieldman, 25 Madison Ave., New York City, recently incorporated, plans 2-story, 50 x 500-ft. silk mill here.

Ala., Mobile—See "Miscellaneous."

La., Shreveport—Republic Oil & Refining Co. plans to establish oil-refining plant here. About $250,000.

Tenn., Kingsport—White Oak Veneer & Lumber Corp. plans to rebuild plant recently destroyed by fire. Loss, $50,000.

Tenn., Nashville—See "Miscellaneous."

O., Cincinnati—P. W. Drackett & Sons Co. plans 2- or 4-story, 75 x 200 ft. and 2- or 4-story, 40 x 80 ft. chemical plant, Spring Grove Ave. P. W. Drackett, Pickering Bldg., pres. R. E. Bostrum, archt., Pickering Bldg., soon receives bids.

O., Cincinnati—Rapid Electrotype Co., Canal St., increased its capital stock from $50,000 to $150,000 and plans factory, McMicken Ave.

O., Cincinnati—Worthington Pump Co., 1504 1st Natl. Bank Bldg., plans 1-story, 50 x 308 ft. machine shop. About $60,000. Austin Co., 14230 Euclid Ave., Cleveland, archts.

O., Cleveland—Cleveland Electric Illuminating Co. plans 1-story, 82 x 122-ft. and 160 x 195-ft. power house at 720 E. 20th St. About $150,000. S. Scoville, Illuminating Bldg., pres. P. L. Cobb, 408 Illuminating Bldg., engr.

O., Cleveland—Ohio Bronze Powder Co., 1120 East 132nd St., increased its capital stock from $50,000 to $200,000 and plans 2-story, 30x100-ft. factory.

O., Cleveland—A. P. Schraner Pattern Works Co., 430 Prospect Ave., N. W., whose factory was recently destroyed by fire, having plans prepared by F. M. Case, engr., for 2- and 3-story, brick and concrete factory, Pave Ave., N. E., and East 33rd St. About $50,000.

O., Lorain—Cromwell Steel Co., Lorain, plans large steel manufacturing plant on site of steel mills on east side of Black River.

Mich., Detroit—Armour & Co., 6th and West Jefferson Aves., having plans prepared for packing and cold storage plant near freight yards of Pennsylvania Lines West of Pittsburgh. About $1,000,000.

Ill., Chicago — C. J. Baillergeon, 710-8 South Dearborn St., will build 2-story, 208 x 241-ft. garage, store, bowling alley and billiard parlor. About $150,000.

Wis., Eau Claire—Standard Oil Co. plans to build plant. About $100,000.

Wis., Grand Rapids—Jackson Milling Co. retained W. E. Ule, engr., to prepare plans for hydroelectric power plant and dam on Wisconsin River. About $500,000.

Wis., Superior—Commercial Club will organize company with $100,000 capital stock to build macaroni factory. Wm. Clendenin, 1315A Hammond Ave., interested.

Wis., West Allis—Kempsmith Mfg. Co., 36th Ave. and Burnham St., plans 1-story, 100x200-ft. concrete addition to factory. About $65,000. Brust & Phillipp, Free Press Bldg., Milwaukee, archts.

Wash., Kirkland—Three Ply Veneer & Box Board Co., Boston Blk., Seattle, having plans prepared for 2-story factory here. About $250,000.

Wash., Tacoma—Chicago, Milwaukee & St. Paul R.R. plans sub-station in connection with electrification of line between Othello and Tacoma. About $160,000. C. F. Loweth, Chicago, ch. engr.

Cal., Arcata—Central California Creameries Co. plans condensed-milk plant. About $100,000.

Industrial Work (Continued)

Cal., Los Angeles—Pioneer Commercial Auto Co. having plans prepared by L. A. Smith, archt., 621 Investment Bldg., 2-story, 97x155-ft., rein.-con. garage, 18th and Fugueroa Sts. About $50,000.

Cal., Redwood City—New York, San Francisco & Hongkong Steamship Co. purchased 10-acre site for shipbuilding plant.

Que., Montreal—Tereault Shoe Mfg. Co., 331 Demontigny St., E., soon lets contract for shoe factory. About $150,000. M. Dufresne, 486 La Salle Ave., Maisonneuve, archt.

Ont., Copper Cliff—Canadian Copper Corp. will increase its capital stock to $10,000,000 and plans 3000-ton mill.

Ont., Hamilton—American Can Co., Emerald St., N., soon lets contract for addition to factory. About $125,000. K. Bethune, mgr.

Ont., Toronto—Imperial Munitions Bd., Royal Bank Bldg., King and Yonge Sts., plans factory on Wallace Ave. About $100,000.

BIDS DESIRED

Ky., Covington—(Official)—Until Nov. 30 by City for franchise right and privilege to build, operate and maintain power houses, poles, etc. L. L. Applegate, recdr.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., West Springfield**—Gilbert-Barker Mfg. Co., Union St. and Cold Spring Ave., let contract 40x90-ft. concrete, brick and steel addition for power plant to H. Wales Lines Co., Meriden, Conn., $75,000.

★**Conn., Hartford**—G. Fox & Co., Church and Pratt Sts., let contract 8-story, 44x120-ft. and 43x55-ft. concrete warehouse and boilerhouse to J. Stewart & Co., Inc., 30 Church St., New York City, $100,000.

★**N. Y., Lockport**—United Paper Board Co., 171 Madison Ave., New York City, let contract 1-story, 35 x 100 ft. power house to Curran & Swartout, 440 Granite Bldg., Rochester.

★**N. Y., Syracuse** — Crucible Steel Co., West Fayette and Magnolia Sts., let contract brick and steel factory addition to J. D. Taylor Constr. Co., 115 South Salina St. About $60,000.

★**N. J., Passaic** — New York Belting & Packing Co., 91 Chambers St., New York City, let contract 5-story, 90 x 250-ft. brick and rein.con. factory to J. W. Ferguson Co. 952 Market St., Paterson. Noted Aug. 23.

★**Ga., Atlanta**—Georgia Ry. & Power Co. let contract 3-story, 60 x 160-ft. rein.con. warehouse to A. V. Gude, Grant Bldg., $50,000.

★**O., Columbus**—Commercial Impvt. Co., Commerce Bldg., let contract 1-story factory, 3rd and Spring Sts., to E. Elford, 104 North 3rd St., $50,000.

★**Ill., Chicago**—Chicago Short Line R.R. let contract roundhouse, repair shop and office to J. H. Prusener, 3811 North Lawndale Ave. About $50,000.

★**Ill., Chicago** — Fitzpatrick Bros. Soap Co. let contract 2-, 3-, and 4-story soap factory to Stressinreuter Bros., 3020 South Halsted St. About $90,000.

★**Ill., Lyons**—Inter-Ocean Refining Co., 332 South Michigan Ave., Chicago, will build 1-story oil refining plant, Joliet Rd. and West 4th St., near Lyons, by day labor. About $400,000. B. S. Reid, secy.

★**Wis., Sheboygan** — Northern Furniture Co., South Waten and North Jersey Sts., let contract 6-story concrete addition to Wm. Guenther & Sons Co., 1621 Huron Ave. Noted Sept. 20.

★**Ia., Des Moines**—Standard Oil Co. let contract 2-story warehouse, garage barn and filling station to F. Weity Co., 713 Mulberry St. About $250,000.

Minn., Minneapolis—See "Buildings."

★**Neb., Omaha**—J. F. Fitzgerald, 340 Bee Bldg., let contract 1-story, 132x132-ft. garage, 16th and Leavenworth Sts. to Gehrke & Strauser, 2209 Franam St. About $100,000.

★**Mo., Kansas City**—Kansas City Light & Power Co., Grand Ave., let contract foundation of $4,000,000 unit to new $10,000,000 power plant to Foundation Co. of New York, 233 B'way., New York City. Noted Sept. 27.

★**Tex., San Antonio**—Southern Ice & Cold Storage Co., 110 Guenther St., let contract building factory to York Mfg. Co., York, Pa., $165,000.

★**Colo., Denver**—Gas & Electric Co. let contract 1-story, 60 x 160-ft. boiler house and stack to H. H. Kerr, 152 Washington St. About $56,000.

★**Ariz., Tempe**—Tempe Milling Co., Mill Ave., let contract 3-story, 40 x 75-ft. warehouse, 4-story, 40 x 40 ft. mill building, 5-story, 20 x 40 ft. bins, etc. to J. C. Steel, 1013 West Jefferson St.

★**Cal., Orange**—Santiago Orange Growers Assn. let contract 143 x 170-ft. precooling and packing plant, West Palm St., to H. C. Clarke Co., 1101 East 5th St., Los Angeles, $50,059. Noted May 17.

★**Ont., Hamilton**—Armour & Co., let contract brick ice plant, Wentworth St., to Piggott Healey Co., 36 James St., S., $50,000.

BUILDINGS

Proposed Work

Mass., Haverhill—Hospital—Gale Hospital had plans prepared by H. Colby, archt., for addition. About $56,000. Dr. H. M. Crittenden, secy.

Mass., Somerville — High School — Bd. Educ. had plans prepared 2-story, 80 x 86 ft. About $90,000. G. E. Whitaker, chn. W. T. Littlefield, 9 Hamilton Pl., Boston, archt.

Conn., Middletown — Hospital Wards — State soon receives bids. About $125,000. H. S. Noble, Hartford, supt. Johnson & Bruns, Inc., 26 State St., Phila., Pa., archts.

N. Y., Allegheny—Science Hall—St. Bonaventure College plans, 4-story, 60 x 140 ft. brick. About $50,000.

N. Y., Binghamton—School—Bd. Educ. plans altering and repairing Oak St. School, 2-story. About $50,000. E. J. Kelly, supt. C. M. Carlton and L. J. Kaley, O'Neill Bldg., archts.

N. Y., Buffalo—Freight Station—Pennsylvania R.R. plans, 30 x 420 ft., Louisiana and Carroll Sts. About $150,000. A. C. Shand, Broad St. Sta., Phila., ch. engr.

N. Y., Glens Falls—Library and Park—Crandall Trust, c/o O. G. Smith, 178 Glen St., plans improvement. About $75,000. C. A. Platt, 101 Park Ave., New York City, archt.

N. Y., Jamestown — Temple — Masonic Temple Assn. plans 6-story. F. Bush, chn. A. J. Bodker, 62 West 45th St., New York City, archt.

N. Y., Rochester—Club House—Knights of Columbus plan, 3 story, 90 x 200 ft. brick and steel. About $150,000. Gordon & Madden, Sibley Bldg., archts.

N. Y., Syracuse—Laboratory—Syracuse University plans, 5-story, 40 x 120 ft. brick and steel. About $125,000. J. R. Day, chancellor. E. A. Hallenbeck, 307 Maple St., archt.

N. J., Asbury Park — Church — First Methodist Episcopal Congregation plans rebuilding. About $100,000. L. K. Willman, Grand and 2nd Aves., pastor. L. E. Smith and H. E. Warren, 2 West 47th St., New York City, archts.

N. J., Camden—High School—Bd. Educ. had plans prepared by C. S. Adams, archt., 3-story. About $500,000.

N. J., Red Bank — School — Bd. Educ. plans 2-story, 75 x 123-ft. About $100,000. R. A. Strong, pres. E. A. Arend, Kinmouth Bldg., Asbury Park, archt.

N. J., Red Bank—Store—C. Lewis, 324 Broad St., had plans prepared. About $50,000.

Pa., Bloomsburg—Bank and Office—Columbia County Trust Co. having plans prepared by V. T. Ritter, archt., 1st Natl. Bank Bldg., Huntington, W. Va., for 4-story, 24 x 120 ft.

Pa., Chester—(Official)—Club House—Knights of Columbus receiving bids about January, 3-story, 60x60-ft., about $50,000. C. W. Brazer, Crozer Bldg., archt. Noted Sept. 27.

Pa., Olney—(Phila. P. O.)—Bank—Olney Bank plans 1-story, 40 x 80 ft. About $75,000. T. Tansey, 5th St. and Tabor Rd. pres. Bothwell & Crugger, Olney Park, Phila, archts.

Pa., Olyphant — Church — St. Patrick's Congregation had plans prepared by J. J. Howley, archt., Scranton. About $50,000.

N. C., Charlotte—High School—Bd. Educ. plans 2-story, 150 x 225 ft. About $150,000. J. F. Leitner, archt., Healy Bldg., Atlanta, Ga., soon receives bids.

N. C., Greensboro — Bank and Office — American Exchange National Bank, having plans prepared, 10-story. About $200,000.

Ga., Atlanta — Sunday School — Grace Methodist Episcopal Congregation having plans prepared. About $75,000. W. McElreath, chn. bldg. com.

Tenn., Knoxville—Schools—See "Water-Works."

Ky., Louisville—Hotel—Central Hotel Co. plans 8-story, steel; 150 rooms. Joseph & Joseph, Republic Bldg., archts.

O., Akron—Hospital—Akron City Hospital plans 7 additional units, brick, steel and concrete. About $750,000.

O., Cincinnati—School—Bd. Educ. had plans prepared, 2-story, concrete and stone, 3042-72 Durrell Ave. About $200,000.

O., Cleveland—Schools, Hospital, etc.—City election Nov. 6, to vote on $3,000,000 bond issue to build schools, $1,000,000 for hospital and sanitariums and $1,250,000 for jail.

O., Cleveland—Schools—Bd. Educ. had plans prepared by W. R. McCornack, archt., East 6th St. and Rockwell Ave., additions to Mt. Pleasant and Chesterville Schools. About $71,400 and $67,800 respectively.

O., Columbus—Hospital—Children's Hospital, Miller Ave. and Franklin Park, having plans prepared for hospital in Livingston Park. Richards, McCarthy & Balford, Hartman Bldg., archts.

O., Columbus—Hotel—Grant Realty Co. soon lets contract 12-story, brick and terra cotta, Town St. and Grant Ave. About $280,000. M. Peterman, Hartman Bldg., archt.

O., Columbus—Schools—City plans $3,500,000 bond issue to build, improve and enlarge various high and elementary schools.

O., London—Penitentiary—Penitentiary Comn. plans 2-story. About $3,000,000. S. J. Black, Upper Sandusky, secy. Richards, McCarty & Bulford, Hartman Bldg., Columbus, archts.

O., Norwalk—School—Bd. Educ. having plans prepared by J. E. Scott, archt., for 2-story. About $115,000. J. A. Sipher, pres.

O., Plymouth—High and Grade School—City plans election soon to vote on $50,000 bond issue for 2-story. C. S. Walker, clk. bd. educ. Althaus & Jones, Market Bldg., Mansfield, archt.

Mich., Detroit—Y. W. C. A. soon lets contract 10-story building, Adams Ave. and Witherell St.

Ill., Chicago—Hotel—Blackstone Co., 50-58 East 7th St., plans 21-story, brick. About $1,000,000. Marshall & Fox, engrs.

Ill., Chicago—Office—Old Colony Insurance Co., 37 West Van Buren St., plans 16-story, 50 x 166-ft., 166-72 West Jackson Blvd.

Ill., Chicago — School and Hall — St. Bartholomew's Parish plans, Addison St. and Lavergne Ave. About $50,000. Rev. W. O'Shea, pastor.

Wis., Green Bay—School—City Council passed ordinance to issue $175,000 bonds for rebuilding Whitney School, recently destroyed by fire.

Wis., Milwaukee—Depot and Freight House—See "Railways."

Wis., Milwaukee — Hospital — Columbia Hospital receiving bids in December for 2nd unit, Hartford and Maryland Aves. About $250,000. F. L. Sivyer, chn. executive com. Schuchardt & Judell, 428 Jefferson St., archts.

Buildings (Continued)

Wis., Wales—Infirmary—State plans addition to State Tuberculosis Sanitarium. About $100,000. M. J. Tappins, secy. bd. control. A. Peabody, Capitol Bldg., Madison, archt.

Ia., Grand View—(Des Moines P. O.)—School—Grand View Dist. plans, 2-story, 60 x 140 ft., brick. About $70,000. H. V. Stineman; secy. Keffer & Jones, 610 Youngerman Bldg., Des Moines, archts.

Ia., Spencer—School—Bd. Educ. plans alterations and additions. About $70,000. F. A. Cook, secy. J. D. Chubb, 109 North Dearborn St., Chicago, archt.

Neb., Lincoln—Hotel—Nebraska Bldg. & Investment Co., 130 South 13th St., plans 12-story, 108 x 150-ft. stone, steel and rein.-con. About $500,000. R. E. Schaaf, pres. J. W. Johnson, Security Mutual Life Bldg., archt.

N. D., Fargo—High School—Bd. Educ. plans altering and repairing. About $70,000. R. Guthrie, secy. W. B. Ittner, archt., Bd. Educ. Bldg., St. Louis, Mo., receives bids about Nov. 15.

Mo., Kansas City—School—Dominican Fathers plan 100 x 128 ft. school, auditorium and gymnasium. About $60,000. White & Dean, archts., 31 Bellefontaine St., soon receives bids.

Tex., San Antonio — Temple — Scottish Rite Masons rejected bids, 104 x 1151ft., brick and steel. About $180,000. New bids. W. H. McCullough, 420 San Antonio St., secy. Hubbell & Greene, North Texas Bldg., El Paso, archt.

Okla., Elk City—High School—School Dist. No. 6 voted $50,000 bond issue for school. Address J. G. Scott.

Okla., Oklahoma—School—City plans election to vote on $50,000 bond issue to build school.

Okla., Oklahoma — Station — St. Louis & San Francisco R.R. soon lets contract 2-story, 130 x 146-ft. brick and rein.-con. About $300,000. E. D. Levy, gen. mgr. Lebenbaum, Marx & Vigeant, 175 West Jackson Blvd., Chicago, archts.

Okla., Tulsa—Hotel—Fay D. Pickens, 1230 South Carson St., and associates, soon receive bids, 12-story. About $1,000,000.

Okla., Tulsa—Church—First Christian Congregation having plans prepared by Van Slyke & Woodruff, archts., 607 Burk Burnett Bldg., Ft. Worth, Tex., stone, brick and rein.-con. About $100,000.

Wash., Olympia—(Official)—High School—Bd. Educ. receives bids about Dec. 1, 3-story; about $100,000. J. H. Wohleb, Capitol Natl. Bank Bldg., archt. Noted Sept. 20.

Ore., Portland—School—Bd. Educ. having plans prepared, 2-story, brick, East Pine and East 16th Sts. About $175,000.

BIDS DESIRED

Mass., Middletown — (Official)—Hospital—Until Nov. 25, by Essex Co. Comrs., Court House, Salem for 5 2-story buildings. J. H. Bickford, 110 State St., Boston, archt. Noted Sept. 20.

N. J., Red Bank—School—Until Oct. 18, by Bd. Educ., 3-story. About $60,000. F. M. Truex, 1170 Broadway, New York City, archt. Noted Aug. 16.

Ind., Ft. Wayne—Hospital—Until Oct. 23 by Hamilton Co., for 2-story, 30 x 80-ft. About $50,000. W. J. Johnson, aud. C. Heatherhogg, Hamilton Natl. Bldg., archt.

Kan., Abilene—High School—Until Oct. 24, by Bd. Educ. About $90,000. A. M. Curry, clk. W. H. Sayler, Gumbel Bldg., Kansas City, Mo., archt.

Kan., Smith Center — (Official) — Court House—Until Oct. 23, by Bd. Comrs. Smith Co. About $85,000. T. W. Williamson & Co., 416 Central Natl. Bank Bldg., Topeka, archts. Noted June 21.

Kan., Wichita—Church—Until Oct. 17, by First Methodist Episcopal Congregation, 1-story, 100 x 130 ft. About $85,000. J. Gaisford, Memphis, Tenn., archt.

Tex., Beaumont—Freight Depot—Until Oct. 15, by Gulf Coast Line, American Trust Bldg., Neches and Bowei Sts. About $50,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Clinton**—School — St. John's Church Society let contract, 2-story, to McDermott Bros., 18 Cedar St., Worcester, $50,000. Noted Apr. 26.

★**Conn., Bridgeport**— School — Bd. Educ. let contract 2-story, 109 x 230-ft. Steuben and Gilmore Sts., to W. Martin & Son, Franklin Bldg., $232,942.

★**Conn., Hartford**—City Hall—City let contract steel work in restoration of old city hall to Berlin Constr. Co., East Berlin, $100,000.

★**N. Y., Brooklyn**—Brooklyn Training School for Girls, 1483 Pacific St., let contract 2- and 3-story 30 x 105 ft., 25 x 45 ft. and 23 x 35 ft. to E. E. Paul Co., 101 Park Ave., New York City. Noted May 10.

★**N. Y., Poughkeepsie**—School—Bd. Educ. let contract 2-story school, to be known as Warring School, Smith and Mansion Sts., to C. Van Akin, 191 Elmendorf St., Kingston. About $50,000.

★**N. Y., Rochester**—Church—Dewey Ave. Presbyterian Congregation let contract 90 x 146-ft. brick, to A. Friederick & Sons, 710 Lake Ave., $75,000.

★**N. Y., Rochester** — High School — Bd. Educ. let contract, at Exposition Park, to Gorsline & Swan Constr. Co., Power Bldg., $387,000.

★**N. J., Morristown** — High School — Bd. Educ. let contract to Reeve & Burr, Morristown. About $54,206.

★**N. J., Rahway**—Y. M. C. A. let contract new building to Carlton Co., Inc., Longacre Bldg., New York City. About $99,845.

★**Ky., Melbourne** — Administration and Mother House—Sisters of Providence let contract 3-story, 92 x 259 ft. to McDermott & Maxon Co., Builders Exch. Bldg., Cincinnati. About $200,000.

★**Ill., Chicago**—Hotel—C. Morse, Jr., 900 South Wabash Ave., let contract 9-story, 60-70 Scott St. to McLeeman Constr. Co., Chicago, $375,000.

★**Ill., Kewanee** — Hospital — City Pub. Hospital Assn. let contract 2-story, 40 x 120-ft. to F. L. Boher, Abingdon. About $75,000. Noted Aug. 23.

★**Wis., Kaukauna**—Church—St. Nicholas Congregation let contract to J. H. Geniesse Co., 820 South Jackson St., Green Bay. About $75,000.

★**Wis., West Salem**—High School—Bd. Educ. let contract to P. Nelson, La Crosse, $65,000. Noted July 26.

★**Minn., Anoka**—Chapel and Assembly—State Bd. Control let contract 2-story addition to Cameron & Co., 505 Ryan Bldg., St. Paul, $54,562. Noted Sept. 20.

Minn., Mineapolis—Hospital—Bd. Charities and Corrections, Court House, received low bids 3-story, rein-con. hospital and 1-story, 25 x 40-ft. rein.-con. power house, from R. J. Cheney & Co. 716 11th Ave., $86,748; Madsen & Peterson, 802 Plymouth Bldg., $94,200; F. G. McMillan, 2 S. E., 5th St., $94,554. Noted June 14.

★**Minn., Morris**—Dining Hall and Gymnasium—West Central Agricultural Station let contract 2-story, 88 x 92-ft. to H. J. Frandsen, 510 Rice St., St. Paul. About $65,000.

★**Neb., Omaha** — Exchange — Nebraska Telephone Co., 18th and Douglas Sts., let contract 15-story, 100x132-ft., brick and tile to Lanquist & Illsley, 1100 North Clark St., Chicago. About $750,000. Noted Sept. 13.

★**S. D., Rapid City**—School—Bd. Educ. let contract 1-story, 121 x 131-ft. to Anderson-Taylor Constr. Co., 534 Lumber Ex., Minneapolis. About $57,000.

★**Tex., Carlsbad**—Dormitory—State Tuberculosis Sanitarium let contract to McGregor & Henger, 421 Mills Bldg., El Paso. About $145,360. Noted July 19.

★**Okla., Tulsa**—Office—J. S. Cosden, Daniels Bldg. let contract 15-story, 60 x 100-ft. rein.-con. to A. Fuller Constr. Co., 418 Dwight Bldg., Kansas City, Mo., $75,000.

★**Wash., Spokane**—Orphan's Home—L. W. Hutton, Hutton Bldg., let contract, 3-story to P. L. Peterson, Hutton Bldg., $200,000. Noted Sept. 27.

★**Cal., Escondido**—Bank, etc.—L. B. Thompson, Chicago, let contract 3-story, 62 x 225 ft., bank, store, lodge hall and apartment building to Geo. Flickett, 935 West 35th Pl., Los Angeles. About $55,000.

★**Cal., Oroville**—High School—Bd. Trustees, Oroville High School, let contract to C. J. Guth, 28th and L Sts., Sacramento. About $63,500. Noted Sept. 13.

★**Que., Montreal**—Office—Provincial Government let contract 1-story addition to J. B. Gratton, 419 Labrecque St. About $75,000.

★**Man., Foxwarren**—School—Birtle Municipality let contract to Progress Constr. Co., Ltd., 88 Provender St., Winnipeg. About $50,000.

★**Man., Winnipeg**—Office—French Syndicate, 415 Paris Bldg., let contract to Carter-Halls-Adlinger, Union Bldg., $200,000.

FEDERAL GOVERNMENT WORK

Proposed Work

Mass., Boston — Hospital — War Dept., Wash., N. D. Baker, secy., plans, 1-story. About $500,000.

Mass., Leominster — Post Office — J. A. Wetmore, superv. archt., treas. dept., Wash., preparing plans. About $90,000.

N. Y., New York—Hospitals—War Dept., Wash., N. D. Baker, secy., plans to build 3 1-story hospitals. About $1,500,000.

Wash., D. C.—Hospital—War Dept., Wash., N. D. Baker, secy., plans, 1-story, in Soldier's Home Grounds. About $500,000.

Ga., Forsyth—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., allowed J. H. Wilder, Columbus Rd., Macon, to withdraw his bid. All other bids rejected. Noted Sept. 20.

Cal., San Diego—Buildings—War Dept., Wash., D. C., N. D. Baker, secy., having plans prepared by B. Goodhue, archt., 2 West 47th St., New York City, for 20 buildings, including administration building, drill hall, etc., to be erected on 732-acre site, to be reclaimed by dredging, for marine brigade post. About $600,000 available for work, $305,000 for dredging. U. S. Engr., Central Bldg., Los Angeles, soon receives bids dredging 1,250,000 cu.yd.

BIDS DESIRED

N. Y., Brooklyn—Power House—Until Oct. 31, by Bureau Yards and Docks, Navy Dept., Wash.

Pa., Ft. Mifflin—Mine Storage Building—Until Oct. 15 (Extension of date) by Bureau Yards and Docks, Navy Dept., Wash. Noted Sept. 27.

Pa., Hollidaysburg — Post Office — Until Oct. 31, by J. A. Wetmore, superv. archt., treas. dept., Wash.; advertised in this issue.

Pa., Phila.—Buildings—Until Oct. 8 by Bureau Yards and Docks, Navy Dept., Wash., constructing galvanizing plant, oxy-acetylene generating plant, engine house, 2 locker houses, etc.

Md., Indian Head—Wharf—Until Oct. 8 by Bureau Yards and Docks, Navy Dept., Wash.

N. C., Burlington — Post Office—Until Nov. 5, by J. A. Wetmore, superv. archt., treas. dept., Wash.

La., New Orleans—Crane—Until Oct. 8 by Bureau Yards and Docks, Navy Dept., Wash., furnishing 10-ton bridge crane in pattern and machine shop, Naval Station.

Ky., Louisville—Power House—Until Oct. 31, by U. S. Engr. Office, Louisville, building at Lock No. 41; advertised in this issue.

O., Cincinnati — Maneuver Boats — Until Nov. 2, by U. S. Engr. Office, Cincinnati, building 2 steel hull maneuver boats with machinery; advertised in this issue.

Ind., Valparaiso—Post Office—Until Nov. 2, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Mich., Detroit—Construction Material—Until Nov. 1, by Lighthouse Inspector, 341 P. O. Bldg., Detroit, furnishing c.-i. stairs and lantern deck, about 20 tons structural steel work, c.-i. laterns for Sand Hill Light Sta.; advertised in this issue.

Mich., Detroit—Construction Material—Until Oct. 15, by Lighthouse Inspector, 341 P. O. Bldg., Detroit, furnishing 750 cu.ft. cut-stone work, about 85 M face brick, 150 M common brick for Sand Hills Light Sta.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Boston — Battery Shed — Bureau Yards and Docks, Navy Dept., Wash., received low bids building at Navy Yard, (a) net price, (b) deduct if heating is omitted; Coleman Bros. Marginial St., Chelsea; (a) $31,900, (b) $4500; C. M. Leach,

Federal Government Work (Continued)

P. O. Box 2285, Devonshire St., (a) $32,256, (b) $4256; Hamilton & Chambers, 29 Bway., New York City, (a) $33,500, (b) $4000.

★Mass., Hingham—Heating Temporary Buildings—Bureau Yards and Docks, Navy Dept., Wash., let contract to Cleghorn Co., 54 Batterymarch, Boston, $19,800.

★Mass., Hingham—Temporary Buildings—Bureau Yards and Docks, Navy Dept., Wash., let contract to G. A. Fuller Co., 710 Bd. Trade Bldg., Boston, $28,766.

★Conn., New London—Additions to Barracks—Bureau Yards and Docks, Navy Dept., Wash., let contract to R. H. Arnold Co., Woodward Bldg., Wash., D. C., $27,990.

Conn., New London — Crane — Bureau Yards and Docks, Navy Dept., Wash., received low bids furnishing 30-ton revolving crane, Naval Submarine Base, from McMyler Inter-state Co., Bedford, O., $25,500; V. R. Browning & Co., 17701 Lake Shore Bldg., Cleveland, $50,000.

★N. Y., Brooklyn—Steam Heating Apparatus—Bureau Yards and Docks, Navy Dept., Wash., let contract installing at Sect. Base No. 6, Navy Dept., to Hopson & Chapin Manufacturing Co., New York City, $23,300.

N. Y., Cohoes—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids, (a) limestone, (b) sandstone, from Oscawana Bldg. Co., 101 Park Ave., New York City, (a) $80,970, (b) $85,000; W. H. Fissell & Co., 1328 Bway., New York City, (a) $86,000, (b) $92,000; Feeney & Sheehan Co., 164 Montgomery St., Albany, (a) $86,225, (b) $87,225. Noted Aug. 16.

★Wash., D. C.—Aviation Camp—War Dept. let contract building addition to camp at Hampton Rds. to J. G. White, Hampton, Va.

★Wash., D. C.—Barracks and Quarters—Quartermaster Corps, War Dept., let contract to P. F. Gormerly, Union Trust Bldg., $500,000 to $1,000,000.

Wash., D. C.—Jet Condensers and Pumping Equipment—Bureau Yards and Docks, Navy Dept., received low bids furnishing at various navy yards from Alberger Pump & Condenser Co., 140 Cedar St.; E. J. Smith, 30 Church St.; A. S. Cameron Steam Pump Co., 11 Broadway, all of New York City.

★Wash., D. C.—Laboratory—Bureau of Standards, Wash., let contract 4-story rein.-con. to Turner Constr. Co., 242 Madison Ave., New York City. Noted June 14.

★Wash., D. C.—Motor-Generator Sets, Accessories, etc.—Bureau Yards and Docks, Navy Dept., Wash., let contract, furnishing at Phila. and San Pedro, Cal., Navy Yards, to General Electric Co., River Rd., Schenectady, N. Y., $51,490; electric equipment, Boston, Mass., and Mare Island (Vallejo) P. O., Cal., to Allis Chalmers Mfg. Co., West Allis, Wis., $51,490. Noted Sept. 20.

Wash., D. C.—Coast Guard—Navy Dept., U. S. Coast Guard Headquarters, received low bid for new building and accessories at Coast Guard Station No. 166, Wash Woods, N. C., from G. W. Wines, East Orange, N. J., $18,886, time, Aug. 15, 1918; J. W. Martin, Elizabeth City, N. C., $20,100, time, Jan. 1, 1919; Evans & Meekins, Manteo, N. C., $21,500, time, Dec. 1, 1918. Noted Aug. 30.

★S. C., Charleston—Storehouse—Bureau Yards and Docks, Navy Dept., Wash., let contract to R. H. Arnold, Woodward Bldg., Wash., D. C., $217,300. Noted Sept. 13.

★Fla., Black Point—(Outside of Jacksonville)—Quartermaster Cantonment—Quartermaster Corps, War Dept., let contract to A. Bentley & Son, Belmont Ave. and 13th St., Toledo, $1,000,000, cost plus per cent. basis.

★Miss., Vicksburg — Levee Work — 3rd Mississippi River Dist. let contract 1,100,000 cu.yd. levee work, to G. F. Ramsey, 157 Clark Pl., $370,000 and N. T. & E. M. Lawrence, $390,000; 400,000 cu.yd. to Roach Clark & Co., North Memphis Savings Bank Bldg., all of Memphis, Tenn., $130,000. Noted Aug. 30.

★Tenn., Memphis—Aviation Camp—War Dept. rescinded contract let to T. Harmon & Co. and relet same to E. A. Wickham & Co., 19 Scott St., Council Bluffs, Ia.

Ky., Glasgow—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids (a) limestone, (b) sandstone; H. G. Mitchell, Scottsburg, (a) $40,500, (b) $40,800; G. W. Stiles Constr. Co., 289 South La Salle St., Chicago, (a) $42,643; E. A. Steininger Constr. Co., Victoria Bldg., St. Louis, Mo., (a) $43,154. Noted Aug. 23.

Ind., Kendallville—Post Office—J. A. Wetmore, superv. arch., treas. dept., Wash., received low bids, Sept. 21, (a) limestone, (b) sandstone, from E. A. Steininger, Victoria Bldg., St. Louis, Mo., (a) $46,300; Schmidt Bros. Constr. Co., 105 North Clark St., Chicago, (a) $48,900; W. H. Fissell & Co., 1328 Bway., New York City, (a) $55,850, (b) $56,850. Noted Aug. 16.

★Ill., Great Lakes — Wiring — Bureau Yards and Docks, Navy Dept., Wash., let contract outside wiring, at Naval Training Sta., to W. A. Jackson, 37 West Vanderbilt St., Chicago, $27,150.

★Tex., San Antonio—Warehouse—War Dept., Wash., let contract at Naval Air Sta., to Stone & Webster, 147 Milk St., Boston, Mass.

N. M., Farmington—Bridge—Cato Sells, comr. Indian Affairs, Wash., received low bid building steel highway bridge from Monarch Engine Co., 312 17th St., Denver, Colo., $26,790 entire structure, including trestle and approaches, not including earth fill; $19,250 steel superstructure; $4895, 2 abutments, including steel piling and 2 wings; $3227 open pile trestle and approach. Noted Sept. 6.

★N. M., Raton—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to G. A. Shaul, Seneca, Kan., $54,195, time, 1 year. Noted Sept. 20.

Cal., Los Angeles—Fill—U. S. Engr. Office, Los Angeles, received low bid making fill involving 120,000 cu.yd. also rip rap protection therefore at San Pedro harbor, from Russell-Green-Foell Co., 2644 Compton Ave., 82c. per cu.yd. alternate bid, $75,000.

★Cal., Mare Island — (Vallejo P. O.) — Magazine Building — Bureau Yards and Docks, Navy Dept., Wash., let contract to Lange & Bergstrom, Sharon Bldg., San Francisco, $74,802.

★Cal., San Francisco—Barracks for Hospital Corps—Bureau Yards and Docks, Navy Dept., Wash., let contract to Schultz Constr. Co., 939 34th Ave., $21,309.

MISCELLANEOUS

Proposed Work

Wharf—Wilmington, Del.—City plans rein.-con., Church St. and Christiana River. About $80,000. E. M. Hoopes, Jr., city engr.

Seawall—Lake Worth, Fla.—City soon lets contract. About $25,000. H. C. Fugate, comr.

Dock—Safety Harbor, Fla.—Town plans to issue $10,000 bonds to build dock.

Piers, etc.—Mobile, Ala.—Gulf Mobile & Northern R.R. plans to build 3 piers and number of warehouses. About $1,000,000. B. V. Wright, Laurel, Miss., ch. engr.

River Terminals — Nashville, Tenn. — River Transportation Com. of Bd. of Transportation Trustees plans to build here. Project includes large warehouse. Bond issue contemplated for work. Plans will be prepared by Capt. Stewart of U. S. Engr. Office.

Transmission Line—Hazard, Ky.—Kentucky River Power Co., plans, from Hazard to Whitesburg, Blackey, Mayking, Sergent, Kona, Craftsville and La Viers, to supply several operating coal companies. R. L. Cornell, Hazard, mgr.

Subway—Ashtabula, O.—City election Nov. 6 to vote on $140,000 bonds to build subway at Center St. Cost, $340,000. New York Central R.R., G. W. Kittredge, ch. engr., Grand Central Terminal, New York City and Pennsylvania Lines West of Pittsburgh, T. Rodd, ch. engr., Pittsburgh, will appropriate 65 per cent. of cost. L. A. Amsden, city engr. Noted May 31.

Icing Dock and Conveyor—Cleveland, O.—Swift & Co., 3240 West 63rd St. plans. About $19,000.

Garbage Incinerator—Norwood—O.—City plans, on Duck Creek Rd.

Garbage Incinerator—St. Clair Heights, Mich.—(Detroit P. O.)—City voted $25,000 bonds to build garbage incinerator. Noted Sept. 27.

Grandstand — Milwaukee (West Allis), Wis.—State Fair Bd. having plans prepared by A. C. Clas, archt., Colby-Abbot Bldg., for 2nd unit of grandstand to be built at State Fair Park. About $ [illegible] O. E. Remey, secy.

Dam—Stevens Point, Wis.—Jackson Milling Co. plans to build dam across Wisconsin River. About $500,000.

Transmission Line—Dakota, Ia.—[illegible]ern Iowa Gas & Electric Co., Humboldt, granted permission by Railroad Com. to build transmission line on certain roads and highways of Humboldt and Wright Cos., Clarion. D. M. Stearns, mgr.

Park Improvements—Minneapolis, Minn.—Park Bd. plans to spend $500,000 to $600,000 to improve parks.

Subway—Parsons, Kan.—City voted $[illegible],000 bonds to build subways under tracks Missouri, Kansas & Texas Ry. on Main St. Railway to appropriate $60,000 toward cost. L. F. Lonnbladh, Dallas, ch. engr. F. W. Frye, city clk. Noted Aug. 16.

Dam—Kearney, Neb.—Central Power Co. plans, near headgates Elm Creek. J. Dowged, Grand Island, ch. engr.

Lake—Ash Grove, Mo.—See "Excavation and Dredging."

Levee Embankment—Poplar Bluff, Mo.—See "Excavation and Dredging."

Transmission System, etc.—Bells, Tex.—Texas Power & Light Co., Dallas, plans to build substation and high-tension transmission system from Bells to Whitewright. F. R. Slater, Dallas, genl. mgr.

Dam—Azusa, Cal.—United Light & Power Co., Los Angeles, plans Eastwood type rein.-con. dam, 200 ft. high, 500 ft. wide at top, 100 ft. wide at bottom, to impound 44,000 acre-feet of water, at mouth of Prairie Fork in Upper San Gabriel Canyon. G. O. Newman, Pacific Electric Bldg., Los Angeles, engr.

Levees, etc.—Blythe, Cal. — (Official) — Palo Verde Protection Dist. election in December to vote on $500,000 bonds to build levees to protect Palo Verde Valley from Colorado River floods involving 33 mi. levee equipped with railroads. Government will be asked to appropriate $500,000 toward cost. J. C. Allison, 735 Van Nuys Bldg., Los Angeles, engr. Noted Aug. 30.

Dam and Tunnel — Redding, Cal. — Dir. Happy Valley Irrigation Dist. plans election to vote on $300,000 bonds to build Missellbach dam and Hoover Creek Tunnel.

Bulkheading, etc. — Richmond, Cal.—See "Excavation and Dredging."

Dam—Annapolis Royal, N. S.—City having plans prepared by Booker & McKechnie, engrs., Davidson Bldg., Halifax, new rein.-con. dam. About $50,000.

Incinerator—Sarnia, Ont.—City receiving bids about Nov. 1. Cost, $25,000. J. S. Crawford, chn. com. Noted Aug. 30.

BIDS DESIRED

Dike—Bernalillo, N. M.—(Official)—Until Oct 17, by N. Montoya, clk., Sandoval Co., building dike, east bank Rio Grande at Ranchos de Albuquerque.

Pier—Manhattan Beach, Cal.—(Official)—Until Oct. 17, by City, building rein.con. pier; L. Price, clk.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Station Finish—Brooklyn, N. Y.—Pub. Ser. Comn., 120 Bway., New York City, let contract station finish for 11 stations on Culver Rapid Transit R.R. to P. J. Carlin Constr. Co., 1123 Bway., New York City, $731,124. Noted Sept. 20.

★Shaft—New York, N. Y.—Pub. Ser. Comn., 120 Bway., let contract building Shaft No. 2, Route No. 26, part of Queensboro Subway Rapid Transit Ry., to I. J. Stander & Co., Inc., 118 East 28th St., $64,149. Noted Sept. 13.

Station Finish—New York, N. Y.—Pub. Ser. Comn., 120 Bway., received low bids station finish for 8th Ave. and 162nd St. connection, Sect. 10-C; also station buildings Anderson and Jerome Aves., (Bronx Boro.), from J. S. Henderson, 30 East 42nd St., $105,880; Snare & Triest, Woolworth Bldg., $134,600.

★Pipe Line Clairton, Pa. — (Official) — Carnegie Steel Co. let contract manufacturing and installation 10-mi. 40-in. diameter lock bar steel pipe to carry gas from by-product coke ovens now being erected at Clairton, to Duquesne and Edgar Thompson steel plants of Carnegie Co., where transported gas will be used for fuel, to T. A. Gillespie, Westinghouse Bldg., Pittsburgh.

Miscellaneous (Continued.)

Subway—Phila., Pa. — (Official) — We have been informed that Contr. Nos. 201 and 203 have been executed by the Keystone State Constr. Co., 704-9 Penn Bldg., totaling $3,289,015. No definite action has been taken on contracts for Smith, Hauser & Mac Isaac, Inc., 18 East 41st St., New York City and Phila. Subway Constr. Co., 712 Lincoln Bldg., or on other contracts that Keystone Constr. Co. was low bidder on. The statement in our issue of Sept. 20 regarding the contracts was an error.

BUILDING THE GOVERNMENT MERCHANT SHIPS.

It is probable that 200 steel ships of uniform design from 5000 to 9000 tons deadweight each will be built for the United States Government by three concerns to whom contract for 50 such vessels was recently let by the United States Shipping Board Emergency Fleet Corporation. The actual number of ships to be built will be decided by the Government within 60 days from date of contract. The steel for the vessels will be fabricated in different mills throughout the country, and shipped to three assembling plants. The Merchants Steamship Corporation will erect 9000-ton ships at a plant at Bristol, Penn. The New York Shipbuilding Corporation (The American International Corporation) will assemble 7000 to 7500-ton boats at Hogg Island, near Philadelphia. The 5000-ton vessels will be assembled at a plant now building on the Newark Meadows, N. J., for the Submarine Boat Co.

As these three concerns will handle their contracts in the same general manner, only one of them need be considered. The Submarine Boat Co. expects to have its Newark shipways ready to operate in November or December of this year. Twenty-eights ships will be assembled at a time, and each batch should be finished in four months.

All pumping equipment is being furnished by the Worthington Co. Motors, dynamos, and electrical apparatus by the Westinghouse Electric & Mfg. Co. The machine tool requirements of the three ship assembling concerns will probably be nominal. The requirements for machine tools to handle these contracts will be restricted almost entirely to such additions as may be necessary in the existing fabricating mills.

WASHINGTON TO SPEND $9,000,000 ON ROADS AND BRIDGES IN 1918.

The annual budgets compiled by the various counties of the state show an enormous sum set aside for highway construction work, which, taken together with the sum of $1,500,000 to be expended by the State Highway Commission on road work next year, shows a probable total of $9,000,000 available next year for road improvements in this state.

The counties reporting to date are as follows:

Snohomish County—Bond issue roads, $750,000; general road and bridge fund, $105,000; three road district funds, $150,000. Total, $1,005,000. A. B. Dean, county engineer, Everett.

Clallam County—General road and bridge fund, $60,000; four road district funds, $88,000. Total, $148,000. A. J. Blackwood, county engineer, Port Angeles.

Clarke County—General road and bridge fund, $60,400; three road districts, $88,700. Total, $149,100. B. L. Dorman, county engineer, Vancouver, Wn.

Lewis County—General road and bridge fund, $84,250; road districts, $174,000. Total, $258,250. J. D. Noville, county engineer, Chehalis, Wn.

Grant County—General, $45,000; 19 road districts, $80,000. Total, $125,000. C. W. Duncan, county engineer, Ephrata.

Franklin County—General, $9000; gravel roads, $44,750; road district fund, $54,400. Total, $108,150. J. W. Ketner, county engineer, Pasco.

Pierce County—General, $300,000; five road districts, $240,000. Total $540,000. D. H. White, county engineer, Tacoma.

Okanogan County — General, $36,500; three road districts, $19,000. Total $55,500. H. E. Smith, engineer, Okanogan.

Benton County—General, $52,000; three road districts, $57,600. Total, $109,600. G. H. Heberling, engineer, Prosser, Wn.

San Juan County—General, $6000; three road districts, $13,650. Total $19,650. E. Ed. Allen, county engineer, Coupeville.

Skagit County—Road and bridge fund, $56,135; three road districts, $105,000. Total, $161,000. W. E. Costello, engineer, Mt. Vernon.

Chelan County—Road district fund, $10,000. F. M. Berry, engineer, Wenatchee.

Whitman County—Road and bridge, $135,000; thirteen road districts, $164,000. Total, $299,000. J. M. McGraw, engineer, Colfax.

Whatcom County—Road and bridge, $100,000. Chas. Lindberry, engineer, Bellingham.

Cowlitz County—Road and bridge, $37,000; six districts, $79,200. Total, $116,200. F. C. Cramer, engineer, Kalama.

Douglas County—General, $46,880; 16 districts, $82,450. Total, $129,330. R. F. Foster, engineer, Waterville.

Pend Oreille County—General, $18,000; three road districts, $34,000. Total, $52,000. H. A. Sewell, engineer, Newport.

Adams County—Road and bridge, $79,500; 16 districts, $56,500. Total, $136,000. O. J. DeSpain, engineer, Ritzville.

Grays Harbor County—General, $95,000; six road districts, $225,535. Total $320,535. J. D. Robertson, engineer, Montesano.

Mason County—General, $23,250; 8 districts, $49,735. Total, $72,985. A. V. Meyer, engineer, Shelton.

Kitsap County—General, $27,850; 6 road districts, $37,170. Total, $65,020. F. B. Gore, engineer, Port Orchard.

King County—General, $350,000; 3 districts, $650,000; bond roads, $400,000. Total, $1,450,000. Sam Humes, engineer, Seattle.

Fifteen counties have yet to be heard from.

SEWAGE DISPOSAL PLANT, STOMFORD, CONN.

Bids were received by City, Sept. 22, for constructing sewage disposal plant, from (A) Frank Palmer, 131 Sound View Ave.; (B) Eaton, Brown & Simpson, Inc. The unit bids were as follows:

	A	B
Protective work and royalties (lump sum)	$26,500.00	$31,268.00
17,000 cu.yd. excavation	1.25	1.32
11,000 cu.yd. rolling embankment	.65	.29
3,500 cu.yd. concrete	21.25	17.25
200,000 lb. reinforcing steel	.06	.069
43.5 tons cast iron B. & S. pipe	75.00	103.60
15.5 tons cast iron B. & S. specials	80.00	189.00
5.0 tons cast iron flanged pipe and specials	90.00	262.00
Gate valves (lump sum)	712.00	1,310.00
Sluice gates (lump sum)	2,327.00	791.00
Check valves (lump sum)	229.00	4,179.00
8 6-in. flap valves	17.00	17.875
2 8-in. flap valves	20.00	40.00
1,200 lin.ft. 4-in. vit. pipe	.25	.20
20 lin.ft. 6-in. vit. pipe	.35	.41
450 lin.ft. 8-in. vit. pipe	.75	.50
700 lin.ft. 10-in. vit. pipe	1.25	.66
65,000 lb. structural steel	.07	.109
20,000 lb. miscellaneous cast iron, wrought iron and steel	.06	.185
480 lin.ft. railings	1.25	1.84
Screen chamber superstructure (lump sum)	5,700.00	1,322.00
Laboratory building superstructure (lump sum)	7,325.00	9,882.00
13M. ft.b.m. lumber	50.00	149.50
2,560 sq.yd. baffles, including reinforcement	1.00	3.51
Venturi meter (lump sum)	1,650.00	2,235.00
Chlorinating apparatus (lump sum)	2,175.00	1,557.00
Automatic tide gate (lump sum)	300.00	575.00
Chemical equipment and piping (lump sum)	2,900.00	3,644.00
500 lin.ft. 2-in. water line	1.00	.575
2 electric hoists	532.00	583.00
560 lin.ft. railways, steel ties, straight track	1.46	1.46
600 linft. railways, wooden ties, straight track	1.90	1.22
100 lin.ft. railways, wooden ties, curved track	2.00	1.725
9 switches	70.00	75.00
2 tip cars	195.00	204.00
2-in. water line in settling tanks (lump sum)	*1.00	1,119.00
770 cu.yd. crushed stone, sludge beds	2.75	2.59
1,600 sq.yd. macadam	1.00	1.78
Pressure water pump and motor (lump sum)	650.00	632.00
Connecting existing pumps (lump sum)	500.00	287.00
865 lin.ft. fence	1.25	.52
Extended totals	$192,857	$199,699

* Item 36 of Palmer bid was given as $1.00. Explained as meaning $1.00 per lin.ft. of pipe.

DAM, SAN DIEGO, CAL.

Bids were received by City, Sept. 4, for constructing lower Otay Dam, spillway and outlet tower, from (A) Wurster Constr. Co., 654 Spreckles Bldg., (B) H. G. Fenton, 204 Owl Bldg.; (C) James Kennedy, 901 Washington Bldg., Los Angeles; (D) R. P. Shields, Amer. Natl. Bank Bldg., $612,762; (E) Twohy Bros. Co., 677 Spreckles Bldg., Los Angeles, $691,650. The unit bids of the three lowest bidders were as follows:

Schedule 1	A	B	C
12,000 cu.yd. excavation, Class 1	$0.62	$1.75	$1.13
7,500 cu.yd. excavation, Class 2	1.632	2.75	2.48
1,500 cu.yd. excavation, Class 3	.53	1.75	1.13
9,000 cu.yd. excavation, Class 4	1.283	2.25	2.48
500 cu.yd. backfill	2.026	.50	1.50
24,000 cu.yd. concrete	4.973	3.75	4.87
70,000 cu.yd. concrete cyclopean masonry	3.071	3.37	4.87
325 cu.yd. concrete reinforced	7.052	4.00	4.87
30,000 lb. placing reinf. steel	.0141	.0113	.02
10,000 cu.yd. crushing rock for sand	1.08	1.00	2.00
500 lin.ft. drilling holes, core recovering	3.484	3.00	5.25
1,000 lin.ft. drilling holes—percussion	2.088	4.00	5.25
200 cu.yd. grouting under pressure	9.07	5.00	12.00
2,000 lin.ft. laying drain tile and pipe	.275	.20	.15
10,000 lb. placing metal work	.0345	.05	.0375
Schedule 2			
1,000 cu.yd. excavation, Class 3	.54	1.00	1.13
5,250 cu.yd. excavation, Class 4	1.50	2.25	2.48
500 cu.yd. backfill	1.18	1.00	1.50
600 cu.yd. concrete	4.97	4.00	4.82
200 cu.yd. concrete cyclopean masonry	3.50	3.50	4.82
1,200 cu.yd. concrete reinforced	5.40	4.50	4.82
30,000 lb. placing reinf. steel	.02	.0117	.02
Schedule 3			
100 cu.yd. excavation, Class 3	.53	1.00	1.13
200 cu.yd. excavation, Class 4	1.40	2.25	2.48
300 cu.yd. backfill	1.00	.50	1.50
270 cu.yd. concrete tunnel lining	25.57	14.00	15.00
450 cu.yd. concrete reinforced	9.711	15.00	15.00
20,000 lb. placing reinf. steel	.0125	.01125	.02
40,000 lb. placing metal work	.02	.05	.0375
	A	B*	C
Extended totals, Schedule 1	$387,410		$547,838
Extended totals, Schedule 2	$19,767		$25,140
Extended totals, Schedule 3	$12,957		$13,759
Extended grand totals	$420,135	$450,000	$586,737

* Contractor's estimated cost, exclusive of overhead expense and profit, which is provided for in the contractor's proposal by a varying percentage based on final cost of work.

SEARCHLIGHT SECTION

Contracts To Be Let

PROPOSALS

Bids received until October 9, 1917.

Barge Canal Improvements

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS.
Albany, N. Y.,
September 7th, 1917.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, October 9th, 1917, at which place and hour they will be publicly opened and read, for improving the New York State canals pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the acts amendatory thereof and supplementary thereto, and Chapter 570 of the Laws of 1915, as follows:

1

CONTRACT NO. 83.

Erie Canal—Sections 10 and 11.

For completing the canal at Tonawanda and removing a guard-lock and coffer-dam near Sulphur Springs.

Sheets 1 to 6 inclusive.

2

CONTRACT NO. 163.

Erie Canal—Sections 9 and 10.

For raising Spier's Road bridge, completing crests of spillways and other work between Rochester and Lockport.

Sheets 1 to 5 inclusive.

3

CONTRACT NO. 164.

Erie Canal—Section 8.

For completing the construction of the canal at certain locations between Lyons and Newark and for constructing a retaining dam at Macedon.

Sheets 1 to 9 inclusive.

And for the construction of barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

4

TERMINAL CONTRACT NO. 15-M.

Electrical equipment and machinery for operating and lighting the Utica Terminal lock.

Contract plans, sheets 1-11, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans of drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank (or trust company in the case of terminal contract) in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposals shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

W. W. WOTHERSPOON,
Superintendent of Public Works.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., Sept. 19, 1917. Sealed proposals will be opened in this office at 3 p.m., Oct. 31, 1917, for the construction of the United States post office at Hollidaysburg, Pa. Drawings and specifications may be obtained from the custodian of the site at Hollidaysburg, Pa., or at this office in the discretion of the Supervising Architect. JAS. A. WETMORE, Acting Supervising Architect.

Official Proposals

Price, $3.60 an inch—Copy can be received until Tuesday, 10 a.m., for issue mailed the next day.

PROPOSALS

Bids received until October 17, 1917.

Steel Bridge

Harrisburg, Pa.

Pennsylvania Public Service Commission, Harrisburg, Pa.—Sealed proposals will be received at said office until 10 a. m., October 17, 1917, when bids will be publicly opened and scheduled, and contract awarded as soon thereafter as possible, for the construction of a steel bridge, with concrete abutments and concrete pedestals for steel supports, situated on Main Street, Butler Borough, Butler County, over the Conoquenessing Creek and the tracks of the B. & L. E. R. R. and B. & O. R. R. The main span will be 125 feet with 5 approach spans on the north and 6 on the south, making a total length of 687 feet. The roadway to be 28 feet wide and two sidewalks each 5 feet wide. Bidders may secure proper blanks upon personal application or written request to the Public Service Commission, Harrisburg, Pa., and plans may be seen there and if desired may be obtained upon payment of two dollars per set. No refund for plans returned. Plans may also be seen in the office of the State Highway Department, Harrisburg, Pa., 904 Hartje Building, Pittsburgh, Pa., 1001 Chestnut Street, Philadelphia, Pa., and Franklin Trust Co. Bldg., Franklin, Pa.

Bids received until October 23, 1917.

Reinforced Concrete Viaduct

Fort Dodge, Iowa.

Sealed proposals will be received until 9:30 o'clock a.m., October 23, 1917, for the construction of a reinforced concrete viaduct on North Third Street in the City of Fort Dodge, Iowa, in accordance with plans and specifications which may be obtained from the City Engineer upon deposit of $20. Estimated quantities, 190 tons steel, 5720 cu.yd. concrete. Certified check, $10,000.

W. L. TANG,
City Clerk.

Bids received until October 17, 1917.

Concrete Pier Construction

Manhattan Beach, Calif.

Sealed proposals will be received at this office until 7:30 P. M., October 17, 1917, for constructing an all reinforced concrete municipal pier, on concrete piles, about 1250 feet long, and containing about 2000 cubic yards. Information on application to the City Clerk, Manhattan Beach, California.

LLEWELLYN PRICE,
City Clerk.

SEALED PROPOSALS will be opened by the Lighthouse Inspector, 341 P. O. Bldg., Detroit, Mich., at 2 o'clock p. m., on dates indicated herein, for furnishing construction materials for Sand Hills Light Station as follows: Cast iron stairs and lantern deck, Nov. 1, 1917. Structural steelwork, approximately 20 tons, Nov. 1, 1917. Cast iron lantern, Nov. 1, 1917. Cut stone work, approximately 750 cu. ft., Oct. 15, 1917. Face brick, about 85 M, and common brick, about 150 M, Oct. 15, 1917. Separate proposals will be receied for each item. Information upon application to the above office.

U. S. ENGINEER OFFICE, Louisville, Ky.—Sealed proposals for constructing Power House at Lock No. 41, Ohio River, will be received here until 12 noon, central time, October 31, 1917, and then opened. Information on application.